MARICOPA REGIONAL HOUSEHOLD TRAVEL SURVEY

Final Report

NuStats

3006 Bee Caves Rd., Suite A-300. Austin, Texas 78746
(512) 306-9065 . fax (512) 306-9077 . *www.nustats.com*

Contact: Stacey Bricka, Research Director

Table of Contents

1. INTRODUCTION 1
    1.1 Background 1
    1.2 Survey Purpose and Coverage 1
    1.3 Contents of the Report 5

2. SURVEY METHODS 6
    2.1 Sample Design and Performance 7
        Household Response Rates 10
        Identification of Non-Response Bias 10
    2.2 Advance Notification 13
    2.3 Recruitment and Respondent Packet Mailing 13
    2.4 Reminder Calls and Retrieval 15
    2.5 Distribution of Travel Days 16
    2.6 Data Processing 16
    2.7 Geocoding 18
    2.8 Quality Assurance 18

3. WEIGHTING AND EXPANSION 20
    3.1 Weight Calculations 20
        Probability of Selection – Telephone Lines per Household 20
        Probability of Selection – Geography and Household Vehicle Availability 20
        Probability of Selection – Households with Episodic Phone Service 25
        Normalization of Weights 27
    3.2 Expansion Calculations 28
        Calculation of Expansion Number 28
        Calculation of Expansion Factor 28

4. SURVEY RESULTS 31
    4.1 Household Survey Results 31
        Household Demographics 31
        Household Trip Indicators 40
    4.2 Person Survey Results 43
        Person Demographics 43
        Employment Data 46
        Data on Primary Job 47
        Student Data 54
        Internet Usage Data 56
        Person Trip Indicators 58
    4.3 Vehicle Availability Results 59
    4.4 Travel Behavior Results 62
    4.5 Survey Data Expanded 81

5. EVALUATION OF SURVEY RESULTS 83

CONCLUSION 90

APPENDIX A: Recruitment Questionnaire
APPENDIX B: Retrieval Questionnaire
APPENDIX C: Respondent Materials
APPENDIX D: Data Set Code Books
APPENDIX E: Supplemental Data Tables
APPENDIX F: Statistics Table

List of Figures and Tables

Figure 1-1	Study Area Geography	2
Table 1-1	Geographic Distribution of Households	3
Figure 1-2	Geographic Distribution of Households	4
Table 2-1	Sample Goals by Census Designated Place	8
Table 2-2	Comparison of Sample Goals and Actual Responses by Census Designated Place	9
Table 2-3	Comparisons of Household Response Rates Among Metropolitan Areas	10
Table 2-4	Comparison of Survey and Census Household Distributions by Vehicle Availability	11
Table 2-5	Comparison of Survey and Census Household Distributions by Household Size	11
Table 2-6	Comparison of Survey and Census Household Distributions by Household Income	11
Table 2-7	Comparison of Survey and Census Person Distributions by Age	11
Table 2-8	Comparison of Survey and Census Household Distributions	12
Table 2-9	Distribution of Households by Day of Week	16
Table 2-10	NuStats' Continuous Data Flow Progression	16
Table 2-11	Address Geocoding Outcomes	18
Table 3-1	Total Number of Phone Lines per Household	20
Figure 3-1	Determination of City Groupings	22
Table 3-2	Percent Distribution of Surveyed Households by Geography	23
Table 3-3	Percent Distribution of Universe Households by Geography	24
Table 3-4	Weighting Factor to Adjust for Probability of Selection	24
Table 3-5	Distribution of Households by Service Interruption Lengths	25
Table 3-6	Episodic Telephone Ownership Factor	26
Table 3-7	Household Vehicles: Unweighted and Weighted Distributions	27
Table 3-8	Distribution of Surveyed Households by Geography	29
Table 3-9	Distribution of Universe and Expanded Households by Geography	29
Table 3-10	Expanded Survey Data Set – Household Vehicle Distribution	30
Table H-1	Household Vehicle Availability	32
Table H-2	Household Size	32
Table H-3	Household Distribution by Number of Workers	33
Table H-4	Household Distribution by Number of Students	33
Table H-5	Household Bicycle Availability	34
Table H-6	Household Distribution by Ethnic Groups	34
Table H-7	Household Distribution by Income Range	35
Table H-8	Distribution of Low Income Households by Source of Income	35
Table H-9	Distribution by Household Dwelling Type	36
Table H-10	Home Ownership Status	36
Table H-11	Year Moved to Current Residence	37
Table H-12	Computer Ownership	37
Table H-13	Internet Access	38
Table H-14	Type of Internet Access	38
Table H-15	Cellular Telephone Ownership	39
Table H-16	Household Trip Rates by Place of Trip Ends	40
Table H-17	Household Trip Rates by Trip Type	41
Table H-18	Summary of Average Daily Household Trip Rates	41
Table H-19	Average Household Trip Rates by Workers	42
Table H-20	Average Household Trip Rates by Household Ethnicity	42
Table H-21	Average Household Trip Rates by Household Income	42

Table P-1	Gender of Household Members	43
Table P-2	Respondent Age	44
Table P-3	Relationship to Head of House	44
Table P-4	Disability Status	45
Table P-5	Special License Plate / Parking Permit	45
Table P-6	Licensed Driver Status	46
Table E-1	Employment Status	46
Table E-2	Number of Jobs Held	47
Table W-1	Hours Worked at Primary Job	48
Table W-2	Work Schedule	48
Table W-3	Work Start Times	49
Table W-4	Work End Times	49
Table W-5	Detailed Work Start Times	50
Table W-6	Detailed Work End Times	50
Table W-7	Occupation	51
Table W-8	Tenure at Current Work Location	51
Table W-9	Mode to Work	52
Table W-10	Employer Parking Subsidies	52
Table W-11	Avg Monthly Amount Paid to Park at Work by Employer Parking Subsidies	53
Table W-12	Employer Transit Subsidies	53
Table S-1	Level of Education Attained	54
Table S-2	Student Status	54
Table S-3	Number of Days Attend School	55
Table S-4	Mode to School	55
Table I-1	Primary Internet Usage Location	56
Table I-2	Internet Usage Purpose	56
Table I-3	Internet Usage on Travel Day	57
Table I-4	Internet Usage Location on Travel Day	57
Table I-5	Internet Usage Purpose on Travel Day	57
Table P-7	Average Person Trip Rates by Gender	58
Table P-8	Average Person Trip Rates by Respondent Age	58
Table V-1	Distribution of Vehicle Age	59
Table V-2	Distribution of Vehicle Make	60
Table V-3	Distribution of Vehicle Type	61
Table V-4	Vehicle Ownership	61
Table T-1	Place of Activity by Geography	62
Table T-2	Place of Activity by Day of Week	62
Table T-3	Major Activities Reported by Geography	63
Table T-4	Major Activities Reported by Day of Week	63
Table T-5a	Origins and Destinations for Home-based Work Trips – by Origin	65
Table T-5b	Origins and Destinations for Home-based Work Trips – by Destination	65
Table T-5c	Origins and Destinations for Home-based Work Trips	66
Table T-6a	Origins and Destinations for Home-based Shopping Trips – by Origin	66
Table T-6b	Origins and Destinations for Home-based Shopping Trips – by Destination	67
Table T-6c	Origins and Destinations for Home-based Shopping Trips	67
Table T-7a	Origins and Destinations for Home-based Other Trips – by Origin	68
Table T-7b	Origins and Destinations for Home-based Other Trips – by Destination	68
Table T-7c	Origins and Destinations for Home-based Other Trips	69

Table T-8a	Origins and Destinations for Non-Home-based Trips – by Origin	69
Table T-8b	Origins and Destinations for Non-Home-based Trips – by Destination	70
Table T-8c	Origins and Destinations for Non-Home-based Trips	70
Table T-9	Reported Activities at All Places Visited	71
Table T-10	Distribution of Trip Purposes	72
Table T-11	Distribution of Travel Modes	72
Table T-12	Major Travel Modes by Home Location	73
Table T-13	Major Travel Modes by Home Location for Home-based Work Trips	74
Table T-14	Major Travel Modes by Home Location for Home-based Shopping Trips	74
Table T-15	Major Travel Modes by Home Location for Home-based Other Trips	75
Table T-16	Major Travel Modes by Home Location for non-Home-based Trips	75
Table T-17	Reported Trip Durations	76
Table T-18	Reported Trip Durations by Trip Purpose	76
Table T-19	Reported Trip Durations by Trip Purpose for HBW Trips	77
Table T-20	Reported Trip Durations by Trip Purpose for HBS Trips	77
Table T-21	Reported Trip Durations by Trip Purpose for HBO Trips	78
Table T-22	Reported Trip Durations by Trip Purpose for NHB Trips	78
Table T-23	Auto Occupancy by Trip Purpose	79
Table T-24	Average Auto Occupancy by Day of Week and Trip Purpose	79
Table T-25	Household Vehicle Used	79
Table T-26	Freeway Used	80
Table T-27	Access Mode of Transit Rider	80
Table T-28	Egress Mode of Transit Rider	80
Table X-1	Expanded Trips by Trip Purpose – Weekday Travel	81
Table X-2	Expanded Trips by Trip Purpose – Saturday Travel	81
Table X-3	Expanded Trips by Trip Purpose – Sunday Travel	81
Table X-4	Expanded Trips by Mode – Weekday Travel	82
Table X-5	Expanded Trips by Mode – Saturday Travel	82
Table X-6	Expanded Trips by Mode – Sunday Travel	82
Table 5-1	Household Survey Daily Trip Rates by Trip Purpose – Weekday Travel	83
Table 5-2	Household Survey Daily Trip Rates by Trip Purpose – Saturday Travel	84
Table 5-3	Household Survey Daily Trip Rates by Trip Purpose – Sunday Travel	84
Table 5-4	Comparison of Household Survey Trip Rates to NCHRP 365	85
Table 5-5	Comparison of Household Survey Trip Rates to NCHRP Trip Rates	85
Figure 5-1	Home Based Work Trips by Mode and Departure Time	86
Figure 5-2	Home Based Shopping Trips by Mode and Departure Time	87
Figure 5-3	Home Based Other Trips by Mode and Departure Time	88
Figure 5-4	Non Home Based Trips by Mode and Departure Time	89

1. INTRODUCTION

This report documents the design, implementation, and results of the Maricopa Regional Household Travel Survey, conducted by NuStats from February through December 2001. The study was conducted under the auspices of the Maricopa Association of Governments (MAG).

The purpose of a household travel survey is to obtain information related to travel behavior. This includes information on average vehicle occupancy, trip generation, trip distribution, and modal choice. This study is an essential element in the transportation planning and modeling efforts for Phoenix and the Maricopa County region. The study objective was to produce data that could be used to develop and calibrate travel demand models for use in travel forecasting and air quality planning. The resultant data set will fulfill MAG's future needs to update the existing model and will serve as the foundation for an entirely new generation of travel demand models.

1.1 Background

The Maricopa Regional Household Travel Survey includes data from 4,018 households in Maricopa County and a small portion of Pinal County, which contains the city of Apache Junction. The cities in this geographic area are depicted in Figure 1-1. The geographic distribution of surveyed households is shown in Table 1-1 and graphically displayed in Figure 1-2.

Like all recent household travel surveys, the Maricopa Regional Household Travel Study relied on the willingness of area residents to complete diary records of all travel for a 48-hour period. It was based on telephone interviews of randomly selected households from the study area. Household recruitment for the study was conducted through the use of a "recruitment interview", in which respondents were informed of the survey, its purpose, and the obligation of all household members to complete the survey. Data on the household and household members were also collected during the recruitment interview. Participating households were assigned a specific "travel period" or 48-hour period on which to record their travel and activities. This travel day typically took place 7 to 10 days after the recruitment interview. Collection of the travel information was done through the use of a "retrieval interview."

1.2 Survey Purpose and Coverage

Household travel surveys are used to obtain information about work and non-work travel behavior. This includes trip generation, trip distribution, modal choice, and vehicle occupancy. Updated household travel information can be used for modeling purposes, as well as transportation planning projects and air quality planning efforts. Prior to the 2000 Maricopa Regional Household Travel Study, the most recent household travel survey for this region was conducted in 1988/1989.

A total of 5,478 households were recruited to participate in the study. Of these, 4,018 households (73%) completed travel diaries (travel information was gathered from all household members regardless of age). The 4,018 households represent 10,030 persons, 6,589 vehicles, and 78,511 places visited during the 48-hour travel period.

Figure 1-1: Study Area Geography

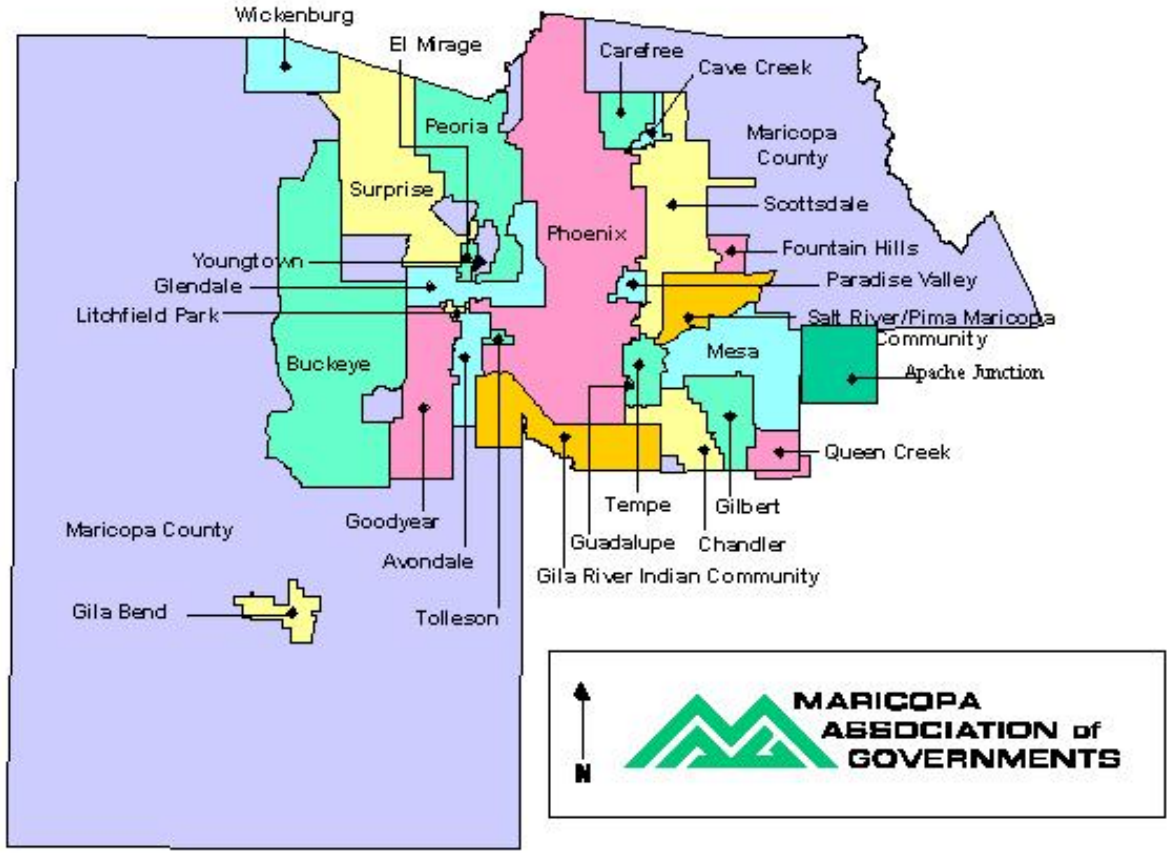
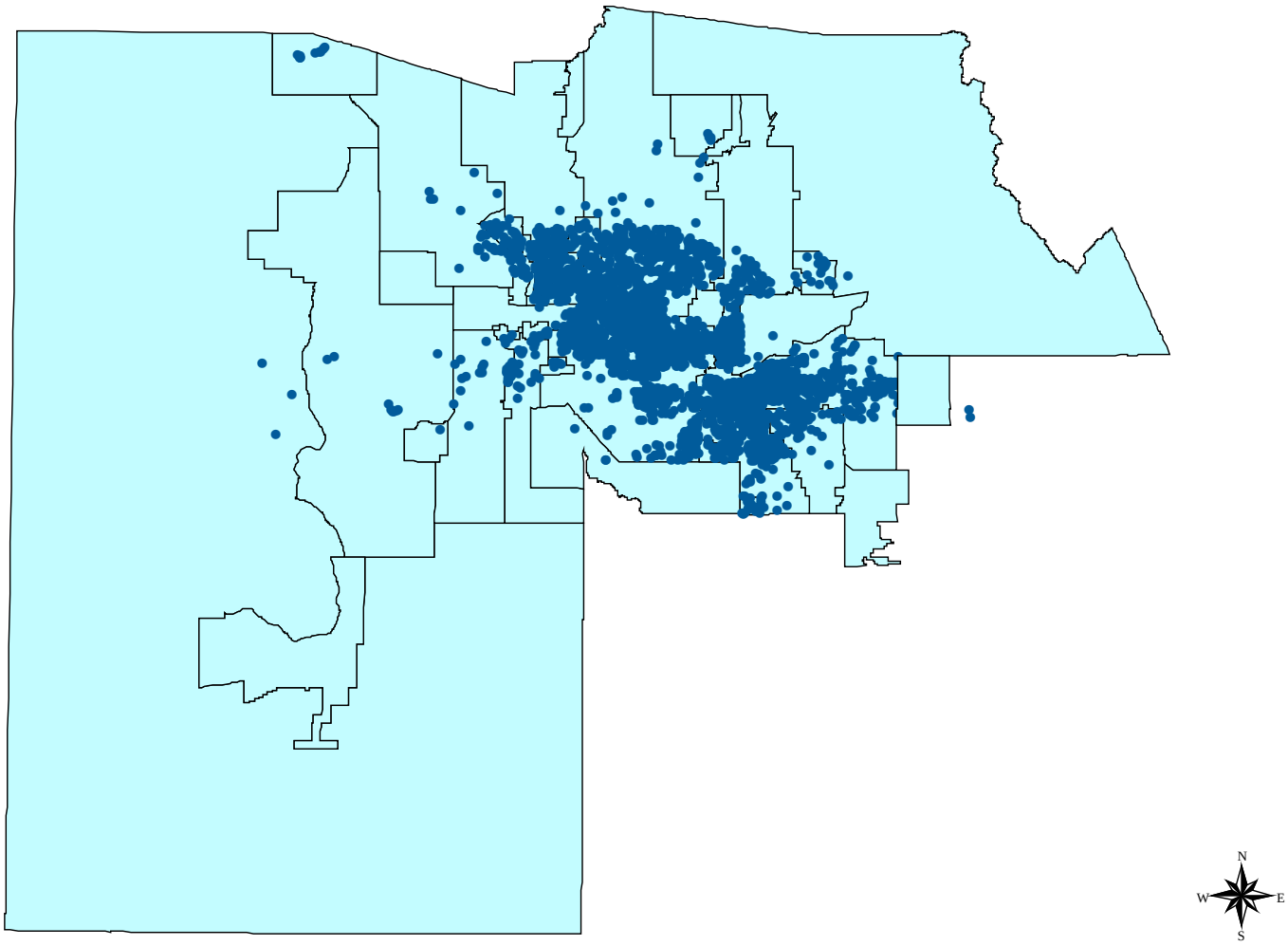


Table 1-1
Geographic Distribution of Households

Census Designated Place	Retrieved	%
Apache Junction	54	1.3%
Avondale	29	0.7%
Buckeye	10	0.2%
Cave Creek	1	0.0%
Chandler	160	4.0%
El Mirage	4	0.1%
Fort McDowell Res	1	0.0%
Fountain Hills	18	0.4%
Gila Bend	1	0.0%
Gila River Reservation	3	0.1%
Gilbert	41	1.0%
Glendale	268	6.7%
Goodyear	7	0.2%
Guadalupe	6	0.1%
Litchfield Park	4	0.1%
Maricopa County	168	4.2%
Mesa	518	12.9%
Peoria	116	2.9%
Phoenix	1905	47.4%
Salt River Reservation	5	0.1%
Scottsdale	234	5.8%
Sun City	95	2.4%
Sun City West	55	1.4%
Sun Lakes	14	0.3%
Surprise	21	0.5%
Tempe	252	6.3%
Tolleson	10	0.2%
Wickenburg	10	0.2%
Youngtown	8	0.2%
Total	**4018**	**100.0%**

Figure 1-2: Geographic Distribution of Households



1.3 Contents of the Report

The purpose of this report is to document the methods used to conduct the Maricopa Regional Household Travel Survey, as well as to present survey results. It is organized into chapters by major topics. In addition to this introduction, the chapters include:

Survey Methods,
Weighting and Expansion,
Survey Results,
Evaluation of Survey Results.

The **Survey Methods** chapter presents the methods used to conduct the survey. Essentially, the six main phases of data collection are presented and evaluated, along with the quality control guidelines established for use in the study. The phases include sample design, advance notification, recruitment, travel data retrieval, data processing, and geocoding.

The **Weighting and Expansion** chapter documents the process used to weight and expand the data. The **Survey Results** chapter presents the weighted demographic and travel data collected during the course of the Maricopa Regional Household Travel Survey. The fifth section of the report contains an **Evaluation of the Survey Results** from a modeling perspective.

2. SURVEY METHODS

The purpose of this chapter is to summarize the methods used to conduct the Maricopa Regional Household Travel Survey. This survey was a multi-stage study, as it involved up to two telephone interviews and one mailing to the households. Prior to the start of data collection, a pilot test was conducted. The pilot test objectives were to refine the survey materials and to fine-tune the processes and programs that were used to carry out the travel behavior study.

During the months of November and December 2000, NuStats conducted a pilot test of procedures and instruments designed for use as part of the Maricopa Regional Household Activity Survey. The objectives of the pilot test were (1) to conduct a "dress rehearsal" of all procedures and instruments designed for use in the full study and (2) to debrief respondents about their participation experience and reactions to materials. Specific areas of assessment included:

- Examination of all stages of data flow procedures and the quality assurance process.
- Evaluation of respondent reaction to the survey process and exploration of local levels of respondent cooperation and response rates.
- Assessment of project staff training and performance.

Throughout all pilot activities, the goal was to target areas for improvement prior to the start of the full study. The role of the pretest was a critical one in the, it was a test of all systems to ensure everything was in place and ready for full-study implementation. As such, the pretest households did not count toward the required completed households for the actual survey.

The pilot test consisted of all activities required to produce a data set containing travel behavior for all members of the surveyed households. This included sample generation, recruitment, placement of respondent materials, reminder calls, retrieval, geocoding, quality assurance, and data delivery. The pilot focused on two specific zip codes: 85009 and 85210. The 85009 zipcode was selected as it represented an area with a high concentration of zero-vehicle households. The 85210 zipcode represented a median-income area. The sample generation for these two zip code areas resulted in the recruitment of 39 households to participate in the study and the collection of travel data from all members of 21 households.

The second phase of the Pilot Test focused on the respondent reaction to the study. NuStats conducted two mini-focus groups with respondents who participated in the survey, completed their travel logs, and went through the retrieval phase. The purpose of the groups was to gain insight on how to improve or further refine the study. A total of six people participated in the groups, three in each. The discussion guide followed a logical line of open-ended questioning that would elicit useful responses from the group participants. The focus groups allowed NuStats to test all study materials – travel logs, reminder sheets, letters and brochures.

Complete documentation of the pilot test results are summarized in the Pilot Test Report. The data collection procedures used in the full study reflected changes based on the pilot test findings.

The survey processes used in the full study included: (1) sample design and performance, (2) advance notification, (3) recruitment and respondent packet mailing, (4) reminder calls and retrieval, (5) data processing, (6) geocoding, and (7) quality control. The purpose of this chapter is to describe each stage as well as to evaluate how well each particular procedure worked.

2.1 Sample Design and Performance

The sample for the Maricopa Regional Household Travel Survey was intended to optimize the production of data with sufficient observations for all relevant levels in four stratification variables: household vehicles, household size, household workers, and geographic distribution (census designated places). As such, the sample design for the survey was designed to guide the collection of data such that the resultant data set would include adequate representation of households by geography as well as mirror key demographic characteristics. The data collection goals by census-designated place are shown in Table 2-1.

The survey employed a probability sample selection process to select households for inclusion in the study. The major requirement for probability samples is that the relative probability (or chance) of any given household in the universe being included in the sample is known. Once the sampling procedure was determined, the selection of specific households for inclusion in the sample was left entirely to chance.

The type of probability sampling employed was stratified sampling in which the sample elements were drawn proportionately to the households within each of the 573 census tracts comprising the study area. This distribution is shown in the "Proportionate Sample" column of Table 2-1.

Once the proportionate sample distribution was calculated, an estimate of the number of 0-vehicle households was determined and found to be insufficient, given the over-sample goals desired for model development. Adjustments were made as shown in the "Disproportionate Sample" column of Table 2-1, to balance proportionate geographic coverage vs. the need for 0-vehicle households.

Once the sampling distribution was finalized, the sample was randomly generated across all telephone exchanges within each census tract. Thus, the sample design for each tract was a strict probability sample for that area. The sampling frame included both listed and unlisted telephone numbers, where "listed" numbers were those for which a household address could be identified.

The definition of a completed household was one in which travel and activity data were collected from all household members (regardless of age). A total of 4,108 households met this criterion. The distribution of completed households by Census Designated Place is shown in Table 2-2.

Table 2-1
Sample Goals by Census Designated Place

Place Name	Proportionate Sample	Disproportionate Sample	Retrieval Goal
Apache Junction	0.1%	0.1%	70
Avondale	0.7%	0.7%	29
Buckeye	0.2%	0.2%	10
Carefree	0.1%	0.1%	4
Cave Creek	0.1%	0.1%	1
Chandler	4.8%	4.2%	158
El Mirage	0.2%	0.2%	7
Fountain Hills	0.6%	0.5%	19
Gila Bend	0.1%	0.1%	3
Gilbert	2.0%	1.6%	60
Glendale	6.7%	6.6%	255
Goodyear	0.3%	0.2%	9
Guadalupe	0.1%	0.2%	6
Litchfield Park	0.2%	0.1%	5
Mesa	13.1%	13.1%	540
Paradise Valley	0.5%	0.3%	12
Peoria	2.9%	2.6%	101
Phoenix	44.0%	46.0%	1811
Queen Creek	0.1%	0.1%	3
Scottsdale	7.8%	6.9%	282
Sun City CDP	2.4%	2.7%	104
Sun City West CDP	1.2%	1.4%	52
Sun Lakes CDP	0.6%	0.5%	20
Surprise	0.4%	0.4%	16
Tempe	6.3%	6.3%	239
Tolleson	0.1%	0.2%	6
Wickenburg	0.2%	0.2%	9
Youngtown	0.2%	0.2%	8
Gila River Res.	0.1%	0.1%	4
Salt River Res.	0.2%	0.3%	10
Fort McDowell Res.	0.0%	0.1%	1
Balance of County	4.1%	3.8%	146
	100.0%	100.0%	4000

Table 2-2
Comparison of Sample Goals and Actual Responses by Census Designated Place

Place Name	Retrieval Goal	Retrieved	% of Goal
Apache Junction	70	54	77.1%
Avondale	29	29	100.0%
Buckeye	10	10	100.0%
Carefree	4	0	0.0%
Cave Creek	1	1	100.0%
Chandler	158	160	101.3%
El Mirage	7	4	57.1%
Fountain Hills	19	18	94.7%
Gila Bend	3	1	33.3%
Gilbert	60	41	68.3%
Glendale	255	268	105.1%
Goodyear	9	7	77.8%
Guadalupe	6	6	100.0%
Litchfield Park	5	4	80.0%
Mesa	540	518	95.9%
Paradise Valley	12	0	0.0%
Peoria	101	116	114.9%
Phoenix	1811	1905	105.2%
Queen Creek	3	0	0.0%
Scottsdale	282	234	83.0%
Sun City CDP	104	95	91.3%
Sun City West CDP	52	55	105.8%
Sun Lakes CDP	20	14	70.0%
Surprise	16	21	131.3%
Tempe	239	252	105.4%
Tolleson	6	10	166.7%
Wickenburg	9	10	111.1%
Youngtown	8	8	100.0%
Gila River Res.	4	3	75.0%
Salt River Res.	10	5	50.0%
Fort McDowell Res.	1	1	100.0%
Balance of County	146	168	115.1%
	4000	4018	100.5%

It should be noted that households in the communities of Carefree, Paradise Valley, and Queen Creek are included in the recruitment. However, no samples were retrieved from these cities.

a. Household Response Rates. In addition to having sufficient sample sizes for modeling, it is also important to understand the level of effort required to attract, retain and obtain travel data from households in the study area. The response rate calculation is the best measure of this level of effort, as it indicates how many households had to be recruited in order to obtain a completed household.

The response rate is the ratio between completed interviews and total eligible sample called on the telephone. The response rate is calculated for recruitment, then retrieval. The overall response rate is determined by multiplying the two resultant rates. The recruitment rate for this study was 42%, the retrieval rate 73% and the overall response rate for the study was 31% (42% * 73%). In other words, 31% of all eligible households that were contacted actually completed the survey. This is comparable to those achieved in similar studies conducted across the US in recent years (see table 2-3). It should be noted that the events of September 11, 2001 that occurred during the course of data collection for this study and had little impact on the response rate.

Table 2-3
Comparison of Household Response Rates
Among Other Metropolitan Areas

Survey	Type	Rate
2000 Maricopa Regional Study	2-day	31%
2000 Philadelphia/South Jersey	1-day	33%
1997/98 Metropolitan NY/NJ/CT	1-day	34%
1999 Seattle	2-day	32%

b. Identification of Non-Response Bias. As with any survey, the issue of non-response bias is important and must be addressed. Non-response bias in a survey data set occurs when certain individuals from the study universe do not participate in the survey. In order to determine if non-response bias is an issue in the Maricopa Regional Household Travel Survey, the survey data was compared to 1995 census data. This comparison determined if specific sub-groups of the population were not included in the data set. This comparison is shown in Tables 2-4 through 2-7. As shown in those tables, the demographics of the households participating in the study tracked the 1995 Census fairly well.

Household Vehicles: Due to a focus on zero vehicle households during data collection, the final data set contains 4% more zero vehicle households than were present during the 1995 Census.

Household Size: The focus on zero vehicle households resulted in a slight over-sample of 1-person households (7% above 1995 Census data). However, the remaining household sizes tracked the Census data fairly well. Data collection efforts that focused on the larger households paid off, as there was no significant difference between the Census data for households with 4 or more persons.

Household Income: The household income distributions (unadjusted for inflation) indicate a slight over-sample of higher income households. However, this is not a significant difference, suggesting that the distribution of survey households by income is fairly consistent with that of the 1995 Census households.

Age: The age of the respondents tracks that of the 1995 Census fairly accurately.

Table 2-4
Comparison of Survey and Census Household Distributions by Vehicle Availability

Household Vehicles	Survey Households	1995 Census Data	Percent Difference
0	10.5%	6.5%	+4.0%
1	40.9%	38.4%	+2.5%
2	36.7%	40.6%	-3.9%
3+	11.9%	14.5%	-2.6%
Total	**100%**	**100%**	

Table 2-5
Comparison of Survey and Census Household Distributions by Household Size

Household Size	Survey Households	1995 Census Data	Percent Difference
1	29.8%	22.9%	+6.9%
2	34.2%	35.9%	-1.7%
3	12.9%	16.2%	-3.3%
4+	23.0%	25.0%	-2.0%
Total	**100%**	**100%**	

Table 2-6
Comparison of Survey and Census Household Distributions by Household Income

Household Income	Survey Households	1995 Census Data	Percent Difference
< $10,000	7.2%	9.6%	-2.4%
$10,000 to < $20,000	15.2%	16.6%	-1.4%
$20,000 to < $35,000	22.0%	-	-
$35,000 to < $50,000	20.2%	-	-
$50,000 to < $70,000	16.0%	-	-
$70,000 +	19.4%	-	-
Total	**100%**		

Note: 1995 Census categories were inconsistent with the survey categories above $20,000. A total of 73.8% of census households reported incomes above $20,000 as compared to 77.6% of survey households, or a difference of 3.8%.

Table 2-7
Comparison of Survey and Census Person Distributions by Age

Age	Survey HH Members	1995 Census Data	Percent Difference
< 22	31.4%	32.1%	-0.7%
22 – 59	49.9%	51.7%	-1.8%
60 – 64	4.4%	3.5%	+0.9%
65 – 74	7.4%	7.0%	+0.4%
75 +	6.9%	5.6%	+1.3%
Total	**100%**	**100%**	

Table 2-8 provides a broader look into the non-response issue by viewing additional household demographic distributions as compared to 1995 Census data. As indicated in Tables 2-4 through 2-8, the survey data is a good representation of the Maricopa County region in terms of residence type, home ownership, households with telephone service interruptions, household size, household vehicles, household workers, household ethnicity and respondent age. Residence type showed the greatest variance from the census data, as the survey included more respondents in single- family homes vs. those that lived in other types of homes.

Table 2-8
Comparison of Survey and Census Household Distributions

Variables	Survey Data %	Census Data %	Difference %
Residence Type			
Single family	62.4%	54.0%	+8.4%
All other types	37.6%	46.0%	-8.4%
Home Ownership			
Own	68.5%	65.0%	+3.5%
Rent	31.1%	35.0%	-3.9%
Other	0.4%	-	+0.4%
Episodic Phone Service			
Yes	1.5%	4.6%	-3.1%
No	98.5%	95.4%	+3.1%
Household Workers			
0	26.4%	31.4%	-4.9%
1	39.0%	32.8%	+6.2%
2	28.9%	30.0%	-1.1%
3+	5.7%	5.4%	+0.3%
Household Ethnicity			
Hispanic	18.5%	20.5%	-2.0%
White	72.6%	71.9%	+0.7%
Black/African American	3.5%	3.5%	-
American Indian	1.7%	1.5%	+0.2%
Asian/Pacific Islander	1.1%	1.9%	-0.8%
Other	2.6%	0.7%	+1.9%

2.2 Advance Notification

All households for whom addresses were available at the time of sampling (i.e., the address was listed in the sampling frame) were mailed an advance letter and brochure. The advance letter served to introduce the household to the Maricopa Regional Household Travel Survey. It was personalized to the household and printed on MAG letterhead. The purpose of the brochure was to provide detailed information about the survey, to explain what participation would entail and to provide answers to commonly asked questions. The project website was also referenced, if additional information was required.

A total of 9,980 advance notification packets were mailed to sampled households for whom a name and address were available in the sampling frame. For those households where only a telephone number was available (i.e., unlisted telephone number), there was no advance notification.

2.3 Recruitment and Respondent Packet Mailing

Approximately five to seven days after the advance letters were mailed, the first recruitment attempts were made. The purpose of the recruitment interview was to secure participation from the household and to collect baseline demographics for the household and its members, vehicle information and work or school addresses. The interview was conducted using computer-aided telephone interviewing (CATI) technology. The day following recruitment, personalized diaries were prepared for each household and mailed.

The recruitment calls began in March 2001 and continued through May 2001, then began again in July 2001 and continued until November 2001, allowing for breaks during the summer months and Thanksgiving holiday. Over the course of the recruitment effort, 81,252 telephone numbers were called. Of these:

13,103 (16%) resulted in contact with eligible households.
34,726 (43%) were determined to be ineligible (non-working, non-household or non-voice lines, and
33,423 (41%) were unable to be classified as eligible or ineligible after 8 call attempts

Of the eligible households reached, 5,478 of the 13,103 agreed to participate in the study (42%). The average length of the recruitment call was 17.1 minutes.

It is important to note that the amount of sample used in this study was higher than normal, given the over-sampling of zero vehicle households desired by MAG.

The recruitment instrument performed well. Marginal item non-response (less than 5%) was noted for most variables, while the income-related questions had the highest non-response. Item non-response by question is as follows:

a. Household Questions – Of the 19 household level questions asked, item non-response was present for 12 of them as noted below:

Household income – 9.9%
Income sources (asked if income < $25k or income refused) – 6.7%
Email account – 6.3%
Internet access type – 5.9%
Length of time no phone service – 3.1%
Lack of phone service – 1.3%

Household ethnicity – 1.2%
Tenure at current home – 0.9%
Own/rent status – 0.1%
Dwelling type – 0.1%
Computer ownership – 0.1%
Internet service – 0.1%

b. Person Questions – Of the 30 person level questions asked, all had some level of item non-response, as noted below:

Cost to park at work – 27.4% (asked of all workers, regardless of reported mode to work)
Cost to park at school – 24.3% (asked of all students, regardless of reported mode to school)
Knowledge of employer subsidies for transit – 17.2% (asked of all workers, regardless of reported mode to work)
Hours worked on secondary job – 11.2%
Mode to work – 11.0%
Employer name – 9.7%
Work end time – 8.2%
Tenure at current work location – 7.9%
Hours worked at main job – 7.2%
Knowledge of employer subsidies for parking – 7.0% (asked of all workers, regardless of reported mode to work)
Work start time – 6.5%
Type of disability – 6.0%
Age – 4.0%
Occupation – 3.8%
Gender – 3.7%
Use internet – 2.8%
Mode to school – 2.8%
Education achieved – 2.5%
Work schedule – 2.3%
Number of days attend school – 2.1%
School location – 1.9%
Work location – 1.9%
Number of jobs held – 1.5%
Internet usage purposes – 1.2%
Work status – 0.5%
Disabled – 0.4%
Disabled license plate – 0.4%
Relationship to respondent – 0.4%
Student status – 0.3%
Driver's license status – 0.3%

c. Vehicle Questions – Of the 5 vehicle questions asked, all had a marginal level of item non-response, as noted below:

Vehicle year – 1.9%
Vehicle make – 1.9%
Vehicle model – 6.0%
Vehicle body type – 0.4%
Vehicle ownership – 0.5%

2.4 Reminder Calls and Retrieval

The reminder calls were made to all recruited households the night prior to their assigned travel period. The purpose of the reminder call was to confirm that each household had received its packet and to answer any last minute questions the household might have. Data retrieval began the day following the second travel day or on the appointed day and time (as requested by the respondent).

The retrieval calls began in March 2001 and continued through May 2001, then began again in August 2001 and continued until early December 2001, allowing for breaks during the summer months and Thanksgiving holiday. Over the course of the retrieval effort, all 5,478 recruited households were called. Of these, 4,018 (73%) resulted in completed household interviews. The average length of the retrieval call was 25.4 minutes.

The retrieval instrument itself performed well. Marginal item non-response was noted for 13 of the 21 variables. Item non-response by question is as follows:

Bus fare payment info – 21.5%
Time got off bus – 17.1%
Time arrive at bus stop – 14.1%
Wake time on Day 2 – 3.2%
Wake time on Day 1 – 2.9%
Land use type – 1.7%
Highway usage – 1.7%
Egress mode – 1.7%
Access mode – 0.8%
traveling together – 0.6%
non-household members traveling with respondent – 0.6%
Which household vehicle used – 0.2%
Was a household vehicle used? – 0.1%

2.5 Distribution of Travel Days

As households were recruited, they were asked to keep track of their travel for a specific 48-hour period of time. The goal was to have an equal distribution of households across the weekday travel day pairs and about 10% each for those pairs involving Saturday or Sunday.

Table 2-9
Distribution of Households by Day of Week

Travel Day Pair	Frequency	Percent
Sunday/Monday	422	10.5%
Monday/Tuesday	954	23.7%
Tuesday/Wednesday	788	19.6%
Wednesday/Thursday	725	18.1%
Thursday/Friday	720	17.9%
Friday/Saturday	409	10.2%

Base: All households, weighted.

2.6 Data Processing

The data collected through the recruitment and retrieval interviews were processed daily using NuStats' Continuous Data Flow (CDF) system. The CDF system served as the pipeline to channel data from one stage to the next in a continuous fashion. This system prevents data progression if the stage progression criterion is not met, without impeding the overall flow of data. The CDF system used in this project had 14 stages.

The following table documents the continuous data flow stages from sample generation to timely data delivery. The progression criteria are stated in the third column. Two types of reports were used to monitor progress: production reports showed movement of the data (how many interviews were completed the previous night, geocoding progress, etc.); exception reports showed lack of movement (the number of recruited households that could not be geocoded and therefore were not mailed a packet). Tracking both progression and exceptions was critical to successful completion of the project.

Table 2-10
NuStats' Continuous Data Flow Progression

Stage	Stage Description	Progression Criteria
1	**Sample Generation**	None
2	**Geocode Home Addresses**	Geocoded addresses go to Stage 3 Ungeocoded listed and unlisted addresses go to Stage 4
3	**Advance Mailing** – Introductory letter with study brochure are mailed to sampled households electing this option	All sample progresses to Stage 4.
4	**Recruitment Interview** – Sampled households are contacted to secure participation in the study. Those who agree to participate provide demographic data and are assigned travel days	If the interview is completed, goes to Stage 5 If the interview is not completed, exception report is generated If interview is not attempted, sample status is updated and sample is scheduled for callback according to sample management rules
5	**Geocode Habitual Addresses** – work and school addresses are geocoded	If address geocodes, goes to Stage 6 If address does not geocode, exception

		report generated and also proceeds to Stage 6 but flagged with address information need
6	**Diary Placement** – A personalized diary packet is prepared and mailed to each recruited household	If packet is mailed, goes to Stage 7 If packet is not mailed, exception report generated to indicate reason
7	**Reminder Call** – Recruited households are contacted to confirm receipt of diary packet and remind about upcoming travel days	If household is ready, goes to Stage 10 If household needs new packet, goes to Stage 6 If household is rescheduled, can go to Stage 6 or 10 If household refuses, exception report is generated and assigned to interviewer specializing in refusals
8/9	**Travel Days** – Household members record travel on assigned days	
10	**Retrieval Interview** – The first retrieval call is placed the day following travel or at a respondent-designated time	If household provides data according to definition of "complete", goes to Stage 11 If household provides partial data, exception report is generated and household does not progress If household did not record travel data and is rescheduled, can go to Stage 7 or 9 If household refuses, exception report is generated and assigned to interviewer specializing in refusals
11	**Field Edits** – the night the retrieval interview is completed, work is checked for completeness	If work meets standards, goes to Stage 12 If work does not meet standards, exception report is generated and household is assigned for callback / correction
12	**Data Processing** – at the conclusion of each data collection shift, all data are processed and prepared for edit check and geocoding	If processed data meets completeness standards, goes to Stage 13 If processed data does not meet completeness standards, exception report is generated and household is assigned for correction / callback
13	**Geocoding of Trip Ends** – all new address information (new or updates to previously collected information) is geocoded through both batch and interactive processes	If geocoded, goes to Stage 14 If not geocoded, exception report is generated and household assigned for correction/callback Daily reports monitoring hit rates
14	**Data Quality Checks** – all data is subjected to visual inspection and edit check program to ensure quality standards and data specifications are met	If passes, goes to Stage 15 If fails, exception report is generated and household assigned for correction/callback Daily reports monitoring pass rates
	Process complete – data ready for delivery	If process complete, data flagged for delivery and process ends If process not complete and time thresholds crossed, exception report is produced and data specialist addresses household to ensure data movement

2.7 Geocoding

The term “geocoding” defines the process of evaluating address information with the goal of assigning an exact latitude and longitude. This process took place throughout the course of the project, beginning with the home addresses, continuing with habitual addresses (work and school locations), and also including the trip ends (non-home and non-habitual locations) collected during the retrieval stage of the project.

Using ArcView software, all home, work, school and trip locations reported were subjected to the geocoding task, using coverage files provided by MAG. At the conclusion of the project, 25,427 addresses comprised the “location” file for the 4,018 households that completed the study. Of these, 94% were successfully matched to latitude/longitude coordinates. The distribution of addresses by type and geocoding status is shown in Table 2-11.

Table 2-11
Address Geocoding Outcomes

Address Type	Matched	Unmatched	% Matched	Out of Area
Home	4,018	0	100%	0
Habitual (work & school)	6,159	838	88%	62
Other Locations	15,250	795	95%	605
Total	**25,427**	**1,633**	**94%**	**667**

2.8 Quality Assurance

The data that summarizes the demographic and travel behavior characteristics of the 4,018 households was subjected to both manual and electronic quality checks. These checks reviewed the data for conformity to variable requirements, logical consistency and quality standards. The checks included:

a. Across all files

Range of values for each data item is valid, including values for non-response (i.e., responses cannot be outside range)

b. Household file

Compare the size of each household in household file with number of person records for the same household, in the person file.

Compare the number of vehicles recorded in the household file with number of vehicle records in vehicle file for each household.

Sum the number of places and trips in trip file for each household, by each travel day as well as for the 48-hour travel period.

c. Person file

Verify that the number of places recorded for each person is at least as many as the number of places the respondent indicated visiting at the start of the retrieval interview.

Verify that if employed, respondent went to work on travel day or provided reason for being absent.

Verify that if a student, respondent went to school on travel day or provided reason for being absent.

d. Vehicle file

Verify vehicle year if older than 1960.

Re-contact household if vehicle make and model were not reported.

e. Trip file

Verify that each household member has at least one place record.
Verify that household and person records exist for each sample number in the trip file.
Verify that travel times are consistent and logical: (1) arrival at place N is prior to departure from place N; (2) arrival at place N+1 is after departure from place N.
Re-contact household if extreme trip durations and/or activity durations.
Verify that all household members returned home at the end of the travel day or that the last reported location was plausible.
Verify that travel data exists for all places except Place 1.
Verify that reported activities are consistent with the reported locations.

Any discrepancies were flagged for research, corrections and/or verification.

3. WEIGHTING AND EXPANSION

The Maricopa Regional Household Travel resulted in the creation of a data set that contains the demographic and travel behavior characteristics of 4,018 households in the Maricopa County region of Arizona. The 4,018 Maricopa households had 10,030 members, 6,586 vehicles, and visited 78,511 places over their 48-hour travel periods. When expanded, the data represents the 957,730 households in the Maricopa County survey universe. The purpose of this chapter is to document the procedures for weighting and expanding the data.

3.1 Weight Calculations

The creation of a household-level weight factor for the Maricopa County households is comprised of four elements that aim to adjust the survey data to correct for differential rates of sampling that occurred and telephone ownership patterns.

a. Probability of Selection – Telephone Lines per Household

The probability of selection calculation assumed that each household in the universe had an equal probability of selection. In other words, it assumed that each household had one phone line, and therefore one chance of selection. This was not the case in the MAG region as 9% of the households indicated they had more than one working voice phone line (see Table 3-1). By determining the number of lines represented (# phone lines multiplied by # households with that many lines), the 4,018 Maricopa households reported having 4,440 telephone (voice) lines available.

The weighting factor to account for multiple phone numbers per household was created through a two-step process. First the actual number of voice lines available to each household was determined by subtracting the number of dedicated fax lines from the total phone lines available to the household. Then, FACTOR1 was created to adjust the data to compensate for cases where more than one phone line was available. Given the fact that not all households had only one line, those with one line were actually sampled at less than one chance of selection. These households (with only one line) therefore needed a factor of slightly more than one to reflect the disparity.

Table 3-1
Total Number of Phone Lines per Household

# Phone Lines per Household	# Households	# Lines Represented	FACTOR1
1	3,672	3,672	1.1050
2	287	574	0.5
3	47	141	0.33
4	7	28	0.25
5	5	25	0.20
Total	**4,018**	**4,440**	

b. Probability of Selection – Geography and Household Vehicle Availability

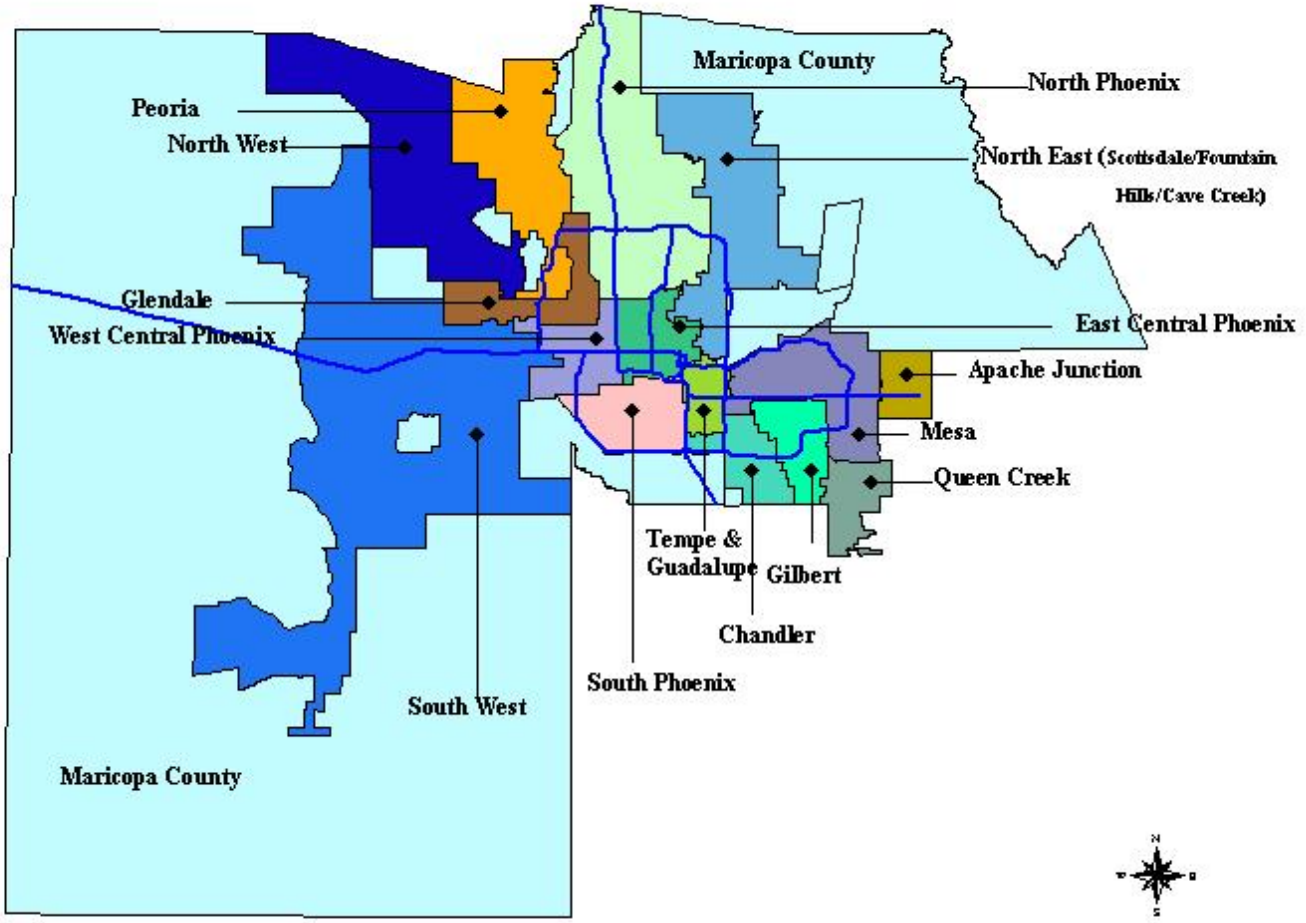
Under ideal sampling conditions, the study area is relatively homogenous with respect to telephone ownership. In those instances, the weight calculations would only need to take into account the sample size (the actual number of telephone numbers drawn and made available for contact) and the estimated universe of households within the study area. The

unique relationship of those two numbers for each county would be the probability of selection, and the inverse of them would be the weight factor that would be applied to each household based on its county of residence.

The Maricopa County region of Arizona does not have this relative homogeneity. Certain locations had very high levels of telephone ownership turnover and very different rates of working telephone numbers, while others were much more stable. The first factor involved in weight calculation incorporated the probability of selection and took into account the number of telephone lines per household. This second factor reflects the heterogeneity of the communities within the study area. The approach combines weighting with geographic balancing and uses the actual number of completed households and the universe of households by census-designated place (see Figure 3-1). MAG staff determined the city groupings used in this weighting process. The city groupings are listed below. The criterion was to allow each group to contain a sufficient number of households so that the resulting statistics were meaningful for analysis. The smallest grouping (Gilbert) contained 41 households.

Apache Junction
Chandler
Gilbert
Glendale
Mesa
Peoria
Phoenix (4 parts: North, West Central, East Central, and South)
Tempe & Guadalupe
Scottsdale, Fountain Hills, and Cave Creek
Sun City & Sun City West
Maricopa County (includes Fort McDowell, Gila River Reservation, and Salt River Reservation)
Southwest (includes Avondale, Buckeye, Gila Bend, Goodyear, Litchfield Park, Tolleson and Sunlakes)
Northwest (includes El Mirage, Surprise, Wickenburg, and Youngtown)

Figure 3-1
Determination of City Groupings



The following three tables illustrate the factor calculation process for the geographic strata. Table 3-2 contains the proportion of completed household surveys by the number of vehicles each household recorded in all city groupings. Table 3-3 contains the same type of proportions except they are based on the 1995 special census instead of the household survey. Table 3-4 contains the weighting factors, which were derived from the data in the previous two tables. These factors account for the probability of selection.

The following example is provided to explain how the specific weights contained in Table 3-4 were developed. The example is for Apache Junction households with one vehicle.

A total of 31 Apache Junction 1-vehicle households completed the household travel survey or 0.77% of the total households in the MAG sample, as shown in Table 3-2.

According to the 1995 Census Data for Maricopa County, 1.72% of the households in the study area were 1-vehicle households from Apache Junction, as shown in Table 3-3.

With a uniform sample, the percent of totals calculated for the sample and the universe would be the same, setting the probability of selection to 1.0. In the case of Apache Junction, the 1-vehicle survey households represented 0.77% of the total, while they accounted for 1.72% of the universe. To create the factor for 1-vehicle Apache Junction households, the distribution of surveyed households was brought into line with the incidence in that portion of the county. Specifically, 1.72% was divided by 0.77% to create the weight factor of 2.2268.

This process was repeated for all cells in both Tables 3-2 and 3-3.

Since the weights were applied by these groupings, there is no need for a weight factor for the entire study region.

Table 3-2
Percent Distribution of Surveyed Households by Geography

Geographic Area	Household Vehicles				
	0	1	2	3+	Total
Apache Junction	0.00%	0.77%	0.50%	0.10%	1.37%
Chandler	0.20%	1.57%	1.87%	0.45%	4.08%
Gilbert	0.02%	0.12%	0.72%	0.15%	1.02%
Glendale	0.70%	2.79%	2.44%	0.95%	6.87%
Mesa	1.52%	5.15%	4.60%	1.69%	12.97%
Peoria	0.25%	0.97%	1.19%	0.55%	2.96%
North Phoenix	0.25%	3.26%	3.53%	1.27%	8.31%
West Central Phoenix	1.02%	4.80%	3.78%	0.97%	10.58%
East Central Phoenix	4.26%	9.66%	6.30%	2.17%	22.37%
South Phoenix	0.85%	1.89%	1.82%	0.60%	5.15%
Scottsdale/Fountain Hills/Cave Creek	0.45%	2.91%	2.39%	0.70%	6.45%
Sun City/Sun City West	0.10%	1.99%	1.32%	0.37%	3.78%
Tempe/Guadalupe	0.72%	2.39%	2.79%	0.65%	6.55%
Southwest	0.10%	0.60%	0.92%	0.42%	2.04%
Northwest	0.00%	0.65%	0.37%	0.07%	1.10%
Maricopa County	0.07%	1.37%	2.12%	0.85%	4.41%
Total	10.50%	40.89%	36.66%	11.95%	100.00%

Table 3-3
Percent Distribution of 1995 Census Households by Geography

Geographic Area	Household Vehicles				
	0	1	2	3+	Total
Apache Junction	0.00%	1.72%	0.63%	0.13%	2.48%
Chandler	0.14%	1.42%	2.41%	0.80%	4.78%
Gilbert	0.02%	0.47%	1.14%	0.39%	2.02%
Glendale	0.42%	2.29%	2.81%	1.13%	6.65%
Mesa	0.70%	5.34%	5.24%	1.96%	13.24%
Peoria	0.13%	0.94%	1.33%	0.44%	2.85%
North Phoenix	0.36%	3.95%	5.82%	2.13%	12.27%
West Central Phoenix	0.82%	3.73%	3.82%	1.55%	9.92%
East Central Phoenix	2.24%	7.21%	4.80%	1.40%	15.66%
South Phoenix	0.30%	1.64%	2.28%	0.74%	4.95%
Scottsdale/Fnt Hills/Cave Creek	0.29%	2.96%	3.64%	1.10%	7.99%
Sun City/Sun City West	0.12%	2.45%	1.02%	0.11%	3.71%
Tempe/Guadalupe	0.37%	2.41%	2.65%	1.03%	6.46%
Southwest	0.08%	0.77%	0.81%	0.29%	1.94%
Northwest	0.00%	0.47%	0.28%	0.05%	0.80%
Maricopa County	0.18%	1.74%	1.56%	0.81%	4.28%
Total	6.17%	39.51%	40.25%	14.07%	100.00%

Table 3-4
Weighting Factor to Adjust for Probability of Selection

MAG Groupings	Household Vehicles			
	0	1	2	3+
Apache Junction	-	2.2268	1.2611	1.3283
Chandler	0.7173	0.9075	1.2924	1.7834
Gilbert	0.8961	3.7554	1.5795	2.6400
Glendale	0.6064	0.8231	1.1514	1.1916
Mesa	0.4618	1.0359	1.1387	1.1561
Peoria	0.5146	0.9690	1.1157	0.8120
Phoenix-North	1.4618	1.2119	1.6466	1.6803
Phoenix-West Central	0.8059	0.7766	1.0092	1.6008
Phoenix-East Central	0.5269	0.7463	0.7628	0.6487
Phoenix-South	0.3499	0.8682	1.2540	1.2306
Scottsdale/Fountain Hills/Cave Creek	0.6399	1.0181	1.5254	1.5764
Sun City/Sun City West	1.2242	1.2325	0.7770	0.3056
Tempe/Guadalupe	0.5123	1.0072	0.9513	1.5884
Southwest	0.7728	1.2829	0.8755	0.6802
Northwest	-	0.7260	0.7567	0.6487
Maricopa County	2.3805	1.2690	0.7360	0.9587
Total	0.5879	0.9662	1.0979	1.1776

c. Probability of Selection – Households with Episodic Phone Service

To account for non-telephone owning households in a telephone survey, an adjustment is required using data reported by those households reporting episodic telephone ownership as proxies. Episodic phone ownership is defined as telephone service that is turned on or off over a given period of time, largely due to a lack of financial resources (telephone service is disconnected due to non-payment and re-activated when the household is able to pay the outstanding bill). Households with episodic telephone service differ from households without telephones (i.e., households that have not had any telephone service established). They are also different from households who have been without service for a period of less than two weeks, as those service interruptions are typically associated with weather or equipment issues.

As shown in Table 3-5, most households (95%) were non-episodic (i.e., they reported no interruption of telephone service in the past year). An additional 102 households (3%) reported service interruptions of less than 2 weeks. However, 84 households (2%) reported having telephone interruption that lasted 2 weeks or longer in the year prior to the survey. These households are used as proxies to represent the other non-telephone households with episodic service in the region.

Table 3-5
Distribution of Households by Service Interruption Lengths

Length of Service Interruption	Frequency	Percent
No service interruptions (non-episodic)	3,832	95.4%
Less than 2 weeks (non-episodic)	102	2.5%
2 weeks but less than 1 month	24	0.6%
1 month but less than 3 months	23	0.6%
3 months but less than 6 months	17	0.4%
6 months but less than 1 year	20	0.5%
Total	**4,018**	**100%**

A weighting factor is required to adjust the data for episodic telephone ownership. This factor was determined comparing the incidence of episodic telephone ownership in the Phoenix region with non-telephone ownership data as reported in the March 2001 Current Population Survey (CPS) conducted jointly by the Bureau of Labor Statistics and the Bureau of the Census. Using the customized data access software provided on the CPS website, it was determined that 4.6% of households in the Phoenix region were non-telephone households (this includes both episodic and hard-core non-telephone ownership categories).

In reality, only about half of the CPS non-telephone households are episodic. This rate is based on a general pattern observed in anecdotal evidence collected through in-person interviews and postcard follow-up surveys conducted with non-telephone households by NuStats on other studies. There have been no papers published that can serve as a resource in this area. Based on NuStats experience, the CPS distribution was adjusted to allow for a direct comparison with the MAG data. Once the adjustment was made, FACTOR3 was a straightforward calculation, as shown in Table 3-6.

Table 3-6
Episodic Telephone Ownership Factor

Is phone service episodic?	MAG Households	MAG Percent	CPS Web Data	Adjusted CPS	FACTOR3
No	3,934	97.9%	95.4%	97.1%	0.9918
Yes	84	2.1%	4.6%	2.3%	1.0952
Total	**4,018**	**100%**	**100%**	**100%**	

d. Normalization of Weights

If the data weights were based on Factors 1 through 3 as presented in the tables above, the weighted data would represent 4,176 households rather than the 4,018 as actually contained in the data set. To account for this and still maintain the relative place of each household after weighting, all households were given a FACTOR4 value of 0.9622.

Once each household received a value for each of the four factors, the weight was calculated through a straight multiplication of factors 1 through 4. The weight was applied in the analysis of the data results as presented in the remainder of this report. An example of the effect of the weighting on the data is shown in Table 3-7, which shows the unweighted and weighted distributions of responses to the household vehicle question.

Table 3-7
Household Vehicles: Unweighted and Weighted Distributions

Household Vehicles	Unweighted Distribution	Weighted Distribution
0	10.5%	6.4%
1	40.9%	40.3%
2	36.7%	40.0%
3+	11.9%	13.3%
Total	**100%**	**100%**

3.2 Expansion Calculations

The 4,018 participating Maricopa households were randomly selected to represent the 957,730 households that comprise the survey universe for Maricopa County. The purpose of this section is to expand the results of the 4,018 households so that they can be used to approximate the 957,730 regional households.

Since the weighting process accounts for probability of selection and representativeness, the creation of an expansion factor for the Maricopa County households is comprised of two elements that aim to expand the survey data from the 4,018 households to the 957,730 regional households that they represent. In essence, the process used to create the weights as detailed above is reversed. First, a general expansion number is created based on the mathematical relationship between the universe and survey households. Then, an expansion factor is derived to maintain proper proportions of the households within the survey data set.

a. Calculation of Expansion Number

There are 957,730 households in the survey universe. Of these, 4,018 were surveyed as part of this project. Therefore, each surveyed household represents 238.35988 universe households. This was determined by dividing the number of universe households by the number of households in the sample. This number becomes FACTOR5 and is attached to each household record.

b. Calculation of Expansion Factor

FACTOR5 is then multiplied by the unique weight created for each household, as detailed in the previous section. The multiplication is necessary to keep the households in relative proportion with each other. The result of this multiplication is the expansion factor, EXPFACT. The results of the expansion factor are shown in the following tables. Specifically, the distribution of households by geography and household vehicle availability is shown in Table 3-8, while the corresponding distribution of universe households compared to the expanded data are shown in Tables 3-9 and 3-10.

Table 3-8
Distribution of Surveyed Households by Geography

Geographic Area	Household Vehicles				
	0	1	2	3+	Total
Apache Junction	0	31	20	4	55
Chandler	8	63	75	18	164
Gilbert	1	5	29	6	41
Glendale	28	112	98	38	276
Mesa	61	207	185	68	521
Peoria	10	39	48	22	119
North Phoenix	10	131	142	51	334
West Central Phoenix	41	193	152	39	425
East Central Phoenix	171	388	253	87	899
South Phoenix	34	76	73	24	207
Scottsdale/Fountain Hills/Cave Creek	18	117	96	28	259
Sun City/Sun City West	4	80	53	15	152
Tempe/Guadalupe	29	96	112	26	263
Southwest	4	24	37	17	82
Northwest	0	26	15	3	44
Maricopa County	3	55	85	34	177
Total	422	1643	1473	480	4018

Table 3-9
Distribution of Universe and Expanded Households by Geography

Geographic Area	1995 Census Data	Expanded Survey Data
Apache Junction	23917	23917
Chandler	45727	45727
Gilbert	18857	18857
Glendale	64295	64295
Mesa	125361	125361
Peoria	27296	27296
North Phoenix	124664	124664
West Central Phoenix	96079	96079
East Central Phoenix	153574	153574
South Phoenix	47370	47370
Scottsdale/Fountain Hills/Cave Creek	81456	81456
Sun City/Sun City West	34475	34475
Tempe/Guadalupe	61276	61276
Southwest	19498	19498
Northwest	9115	9115
Maricopa County	48299	48299
Total	981,258	981,258

*Apache Junction is in Maricopa and Pinal Counties, so the census data for Maricopa County was supplemented by Census data for Pinal County to obtain the appropriate population distribution.

Table 3-10
Expanded Survey Data Set – Household Vehicle Distribution

Census Designated Place	0	1	2	3+	Total
Apache Junction	0	16738	6026	1153	23917
Chandler	2231	17566	20912	5019	45728
Gilbert	460	2300	13338	2760	18858
Glendale	6523	26091	22829	8852	64295
Mesa	14678	49808	44514	16362	125362
Peoria	2294	8946	11010	5046	27296
North Phoenix	3732	48895	53001	19036	124664
West Central Phoenix	9269	43631	34362	8817	96079
East Central Phoenix	29212	66281	43219	14862	153574
South Phoenix	7781	17392	16705	5492	47370
Scottsdale/Fountain Hills	5661	36797	30192	8806	81456
Sun City/Sun City West	907	18145	12021	3402	34475
Tempe/Guadalupe	6757	22367	26095	6058	61277
Southwest	951	5707	8798	4042	19498
Northwest	0	5386	3107	621	9114
Maricopa County	819	15008	23194	9278	48299
Total	91275	401058	369323	119606	981262

4. SURVEY RESULTS

The survey results section is organized to discuss each of the four types of data that were collected. The data types were; household, person, vehicle, and travel. In addition there is a section that shows the result of expanding the travel data to represent all travel in the Maricopa Region.

4.1 Household Survey Results

A total of 4,018 Maricopa County households participated in the Maricopa Regional Household Travel Survey. The household data includes demographic information about the households, such as household size, household vehicles, bicycles owned, dwelling type, home ownership status, tenure, computer ownership, and Internet access. It also includes information necessary for the weighting process (number of telephones per household, number of households per telephone number, episodic telephone ownership), cellular telephone ownership, and summary statistics about the number of places and trips made during the 48-hour travel period.

In a sample of 4,018 households, if 50% answered yes and 50% answered no, the sampling error is estimated at +/- 2.2%. The confidence interval for each response would then, is between 47.8% and 52.2%. We would estimate with 95% confidence that the proportion of the total population who would say yes is somewhere within that interval. The table for estimating the sampling error at 95% confidence interval is shown in Appendix F.

The tables in this section of the report present the weighted results for the 4,018 Maricopa County households and include all household level variables collected during the survey.

a. Household Demographics

The following tables present the demographic characteristics of the Maricopa County households that participated in the study. The household data includes demographic information about the households, such as household size, number of employed household members, household vehicles, bicycles owned, dwelling type, home ownership status, and tenure. It also includes summary statistics about the number of places and trips made during the 48-hour travel period.

Overall, there were 1.64 vehicles per household in the Maricopa County region. Gilbert households had the highest average number of household vehicles (2.01 per household). Sun City/Sun City West, Apache Junction, and East Central Phoenix households had the lowest average vehicles per household.

Table H-1
Household Vehicle Availability

Geographic Area	N	0	1	2	3+	Mean
Apache Junction	100	-	70.0%	25.0%	5.0%	1.35
Chandler	191	3.1%	30.4%	51.8%	14.7%	1.82
Gilbert	81	-	22.2%	56.8%	21.0%	2.01
Glendale	268	6.7%	35.6%	42.7%	15.0%	1.71
Mesa	536	5.4%	40.9%	39.4%	14.4%	1.68
Peoria	113	4.5%	35.7%	44.6%	15.2%	1.75
North Phoenix	484	3.3%	33.7%	46.1%	16.9%	1.84
West Central Phoenix	396	8.6%	38.9%	38.4%	14.1%	1.61
East Central	633	14.5%	46.6%	30.2%	8.7%	1.35
South Phoenix	200	6.0%	33.5%	46.5%	14.0%	1.71
Scottsdale/Ftn Hills/CvCrk	318	3.8%	38.1%	45.0%	13.2%	1.70
Sun City/Sun City West	152	3.3%	66.2%	27.8%	2.6%	1.31
Tempe/Guadalupe	263	5.7%	37.6%	41.4%	15.2%	1.70
Southwest	77	3.9%	40.8%	40.8%	14.5%	1.71
Northwest	32	-	59.4%	34.4%	6.3%	1.47
Maricopa County	174	4.6%	40.8%	36.2%	18.4%	1.74
Total	**4018**	**6.4%**	**40.3%**	**39.9%**	**13.4%**	**1.64**

Base: All households, weighted.

The average size of participating households was 2.49 persons. Gilbert had the highest average household size (3.25 persons). Apache Junction had the lowest, at 1.87 persons per household.

Table H-2
Household Size

Geographic Area	N	1	2	3	4+	Mean
Apache Junction	100	42.6%	43.6%	5.0%	8.9%	1.87
Chandler	191	20.9%	34.6%	16.2%	28.3%	2.63
Gilbert	81	5.0%	26.3%	23.8%	45.0%	3.25
Glendale	268	21.3%	34.8%	19.1%	24.7%	2.68
Mesa	536	26.0%	34.2%	17.0%	22.8%	2.55
Peoria	113	18.6%	37.2%	14.2%	30.1%	2.67
North Phoenix	484	23.5%	37.7%	14.6%	24.1%	2.52
West Central Phoenix	396	22.5%	27.8%	10.6%	39.1%	3.05
East Central Phoenix	633	40.1%	30.8%	10.9%	18.2%	2.20
South Phoenix	200	17.5%	28.0%	16.0%	38.5%	3.09
Scottsdale/Fnt Hills/CvCrk	318	33.3%	42.1%	9.4%	15.1%	2.13
Sun City/Sun City West	152	30.5%	57.0%	4.6%	7.9%	1.93
Tempe/Guadalupe	263	30.0%	37.3%	16.0%	16.7%	2.24
Southwest	77	18.2%	37.7%	9.1%	35.1%	2.84
Northwest	32	31.3%	50.0%	12.5%	6.3%	1.97
Maricopa County	174	28.2%	39.1%	11.5%	21.3%	2.35
Total	**4018**	27.5%	35.5%	13.3%	23.7%	**2.49**

Base: All households, weighted.

The average number of workers across the Valley region was 1.20 workers per household. Gilbert had the highest number of workers (1.71), while Sun City/Sun City West had the lowest (0.52).

Table H-3
Household Distribution by Number of Workers

Geographic Area	N	0	1	2	3+	Mean
Apache Junction	100	56.0%	28.0%	13.0%	3.0%	0.65
Chandler	191	10.5%	37.7%	42.4%	9.4%	1.53
Gilbert	81	2.5%	35.0%	53.8%	8.8%	1.71
Glendale	268	16.2%	45.9%	30.5%	7.5%	1.30
Mesa	536	19.4%	40.5%	33.8%	6.3%	1.29
Peoria	113	29.2%	29.2%	35.4%	6.2%	1.20
North Phoenix	484	16.6%	40.0%	33.1%	10.4%	1.40
West Central Phoenix	396	19.9%	43.9%	28.8%	7.3%	1.27
East Central Phoenix	633	31.0%	40.9%	24.2%	3.9%	1.01
South Phoenix	200	20.5%	28.5%	41.5%	9.5%	1.41
Scottsdale/Fnt Hills/CvCrk	318	31.9%	34.4%	29.3%	4.4%	1.07
Sun City/Sun City West	152	62.9%	23.2%	13.2%	.7%	0.52
Tempe/Guadalupe	263	15.6%	41.1%	38.0%	5.3%	1.34
Southwest	77	17.9%	48.7%	28.2%	5.1%	1.19
Northwest	32	51.5%	39.4%	6.1%	3.0%	0.58
Maricopa County	174	39.1%	26.4%	29.3%	5.2%	1.02
Total	**4018**	24.9%	38.2%	30.8%	6.1%	**1.20**

Base: All households, weighted.

On average, there were 0.66 students in each household in Maricopa County. Gilbert had the highest average number of students per household (1.13), while Sun City/Sun City West had the lowest average (0.19 students).

Table H-4
Household Distribution by Number of Students

Geographic Area	N	0	1	2	3+	Mean
Apache Junction	100	85.0%	4.0%	10.0%	1.0%	0.30
Chandler	191	56.8%	22.1%	14.7%	6.3%	0.73
Gilbert	81	36.6%	22.0%	32.9%	8.5%	1.13
Glendale	268	55.6%	23.1%	13.4%	7.8%	0.76
Mesa	536	58.5%	19.4%	14.0%	8.0%	0.74
Peoria	113	55.8%	22.1%	16.8%	5.3%	0.73
North Phoenix	484	60.5%	20.0%	13.6%	5.8%	0.67
West Central Phoenix	396	58.4%	15.9%	15.1%	10.6%	0.83
East Central Phoenix	633	70.3%	15.8%	8.5%	5.4%	0.51
South Phoenix	200	46.2%	23.6%	19.1%	11.1%	0.99
Scottsdale/Fnt Hills/CvCrk	318	69.2%	16.0%	11.0%	3.8%	0.50
Sun City/Sun City West	152	86.2%	8.6%	4.6%	.7%	0.19
Tempe/Guadalupe	263	58.3%	25.0%	13.3%	3.4%	0.62
Southwest	77	54.5%	11.7%	19.5%	14.3%	0.99
Northwest	32	75.0%	18.8%	3.1%	3.1%	0.32
Maricopa County	174	67.4%	13.1%	11.4%	8.0%	0.62
Total	**4018**	62.4%	18.0%	13.0%	6.6%	**0.66**

Base: All households, weighted.

Overall, there were 0.90 bicycles per household in the Maricopa County region. Gilbert households had the highest average number of household bicycles (1.62 per household) while East Central Phoenix households had the lowest (0.61).

Table H-5
Household Bicycle Availability

Geographic Area	N	0	1	2	3+	Mean
Apache Junction	100	52.5%	18.8%	20.8%	7.9%	0.87
Chandler	191	50.3%	22.5%	15.2%	12.0%	1.08
Gilbert	81	38.8%	12.5%	21.3%	27.5%	1.62
Glendale	268	53.2%	19.5%	13.9%	13.5%	0.99
Mesa	536	50.4%	23.9%	13.1%	12.7%	0.97
Peoria	113	52.2%	16.8%	19.5%	11.5%	1.03
North Phoenix	484	52.7%	18.6%	16.9%	11.8%	1.11
West Central Phoenix	396	61.6%	15.2%	14.6%	8.6%	0.78
East Central Phoenix	633	66.0%	16.9%	11.4%	5.7%	0.61
South Phoenix	200	57.2%	16.4%	12.4%	13.9%	0.92
Scottsdale/Fnt Hills/CvCrk	318	51.6%	19.2%	17.0%	12.3%	1.00
Sun City/Sun City West	152	61.2%	18.4%	15.1%	5.3%	0.67
Tempe/Guadalupe	263	48.7%	23.2%	16.7%	11.4%	0.99
Southwest	77	59.7%	11.7%	19.5%	9.1%	0.86
Northwest	32	54.5%	15.2%	21.2%	9.1%	0.86
Maricopa County	174	52.0%	17.9%	14.5%	15.6%	1.01
Total	**4018**	55.7%	18.7%	14.9%	10.7%	**0.90**

Base: All households, weighted.

The Maricopa County respondents represented a variety of ethnic backgrounds. Seventy-four percent were white, 17% Hispanic, 3% African American, 2% Asian American, and 1% Native American. West Central and South Phoenix had the greatest diversity represented in the survey.

Table H-6
Household Distribution by Ethnic Groups

Geographic Area	N	White	Hispanic	African American.	Asian American	Native American	Other
Apache Junction	100	90.1%	4.0%	-	-	-	5.9%
Chandler	191	73.1%	14.0%	3.1%	3.1%	-	6.7%
Gilbert	81	92.5%	-	-	-	5.0%	2.5%
Glendale	268	65.9%	20.6%	6.7%	3.7%	2.2%	.7%
Mesa	536	78.5%	14.6%	2.8%	1.5%	.9%	1.7%
Peoria	113	74.3%	16.8%	.9%	-	-	8.0%
North Phoenix	484	83.7%	8.1%	1.7%	1.9%	.4%	4.3%
West Central Phoenix	396	53.8%	40.2%	2.5%	1.3%	1.0%	1.3%
East Central Phoenix	633	68.5%	21.4%	4.4%	1.6%	1.1%	3.0%
South Phoenix	200	52.5%	35.0%	10.0%	1.0%	.5%	1.0%
Scottsdale/Fnt Hills/CvCrk	318	90.6%	3.4%	.9%	1.3%	.9%	2.8%
Sun City/Sun City West	152	86.8%	5.9%	4.6%	.7%	-	2.0%
Tempe/Guadalupe	263	78.4%	9.5%	1.9%	3.4%	1.9%	4.9%
Southwest	77	60.3%	33.3%	1.3%	1.3%	1.3%	2.6%
Northwest	32	87.9%	9.1%	-	-	-	3.0%
Maricopa County	174	86.1%	6.4%	1.7%	1.2%	2.3%	2.3%
Total	**4018**	73.9%	17.2%	3.2%	1.7%	1.0%	2.9%

Base: All households, weighted.

Nearly half (42%) of all households reported a household income between $20,000 and $50,000, 21% reported an income of at least $70,000, and 20% reported incomes of less than $20,000. Gilbert had 37% of its respondents with incomes of $70,000 or more, while 30% of West Central Phoenix respondents reported incomes of less than $20,000.

Table H-7
Household Distribution by Income Range

Geographic Area	N	< $10k	$10k - < $20k	$20k - < $35k	$35k - < $50k	$50 - < $70k	$70k+
Apache Junction	100	8.3%	16.7%	32.1%	21.4%	15.5%	6.0%
Chandler	191	4.5%	5.6%	20.9%	13.0%	22.6%	33.3%
Gilbert	81	2.4%	4.9%	7.3%	26.8%	22.0%	36.6%
Glendale	268	7.3%	14.7%	21.6%	19.2%	19.6%	17.6%
Mesa	536	3.3%	13.5%	23.9%	25.6%	13.7%	20.0%
Peoria	113	4.0%	13.0%	14.0%	29.0%	16.0%	24.0%
North Phoenix	484	2.9%	10.0%	15.5%	17.9%	18.1%	35.6%
West Central Phoenix	396	8.1%	22.1%	28.3%	19.9%	11.5%	10.1%
East Central Phoenix	633	11.2%	17.8%	25.5%	19.4%	13.7%	12.4%
South Phoenix	200	7.6%	18.5%	19.0%	16.3%	19.0%	19.6%
Scottsdale/Fnt Hills/CvCrk	318	4.3%	7.8%	14.6%	24.2%	18.1%	31.0%
Sun City/Sun City West	152	7.2%	11.5%	24.5%	23.7%	18.7%	14.4%
Tempe/Guadalupe	263	4.2%	10.5%	17.7%	21.5%	24.1%	21.9%
Southwest	77	8.1%	14.9%	21.6%	16.2%	10.8%	28.4%
Northwest	32	6.9%	13.8%	34.5%	24.1%	17.2%	3.4%
Maricopa County	174	1.8%	12.3%	19.6%	22.1%	18.4%	25.8%
Total	**4018**	5.9%	13.6%	21.3%	20.9%	16.8%	21.5%

Base: All households, weighted.

To assist with monitoring and measuring the effect of recent welfare-to-work initiatives in the region, all households that reported an income of less than $20,000 or refused to provide an income were asked about the sources of their household income. As shown in Table H-8, 2% of this subgroup received welfare benefits in 2001. These households were located in Glendale, Mesa, West Central, East Central, and South Phoenix, and Scottsdale/Fountain Hills. The "Other" sources of income included child support, retirement benefits, parental support, student loans and AHCCCS.

Table H-8
Distribution of Low Income Households by Source of Income

Geographic Area	N	Welfare	Social Security	Disability	Other Govt Sources	None of these	Other
Apache Junction	37	-	73.0%	-	-	13.5%	13.5%
Chandler	32	-	31.3%	3.1%	-	53.1%	12.5%
Gilbert	5	-	-	-	-	100.0%	-
Glendale	76	5.3%	28.9%	5.3%	2.6%	48.7%	9.2%
Mesa	129	1.6%	34.1%	6.2%	4.7%	39.5%	14.0%
Peoria	30	-	56.7%	3.3%	-	30.0%	10.0%
North Phoenix	90	-	30.0%	6.7%	3.3%	46.7%	13.3%
West Central Phoenix	148	4.7%	37.2%	4.7%	4.1%	47.3%	2.0%
East Central Phoenix	238	2.5%	38.5%	6.7%	5.0%	39.7%	7.5%
South Phoenix	64	1.6%	26.6%	9.4%	6.3%	46.9%	9.4%
Scottsdale/Fnt Hills/CvCrk	71	1.4%	54.9%	2.8%	-	36.6%	4.2%
Sun City/Sun City West	40	-	55.0%	12.5%	5.0%	15.0%	12.5%
Tempe/Guadalupe	62	-	29.0%	3.2%	-	50.0%	17.7%
Southwest	20	-	30.0%	-	5.0%	60.0%	5.0%
Northwest	10	-	70.0%	-	-	20.0%	10.0%
Maricopa County	35	-	77.1%	-	-	17.1%	5.7%
Total	1087	1.8%	39.7%	5.2%	3.3%	40.8%	9.2%

Base: All households reporting incomes less than $20,000 or that refused to provide income, weighted.

The majority of households live in a single-family detached structure (64%), while 30% reported living in multi-family structures (duplex, apartments, or condo). Five percent of the respondents live in mobile homes. East Central Phoenix respondents were most likely to live in an apartment. Mobile home dwellers were mostly found in Apache Junction.

Table H-9
Distribution of Household Dwelling Types

Geographic Area	N	Single Family	Multi Family	Mobile Home	Other
Apache Junction	100	48.0%	4.0%	48.0%	-
Chandler	191	69.1%	26.2%	4.2%	0.5%
Gilbert	81	71.3%	28.8%	-	-
Glendale	268	68.7%	24.3%	7.1%	-
Mesa	536	53.9%	38.2%	6.3%	1.5%
Peoria	113	75.2%	18.6%	5.3%	0.9%
North Phoenix	484	70.8%	25.7%	3.5%	
West Central Phoenix	396	73.5%	22.5%	3.5%	0.5%
East Central Phoenix	633	52.5%	43.8%	2.4%	1.3%
South Phoenix	200	77.1%	15.4%	5.5%	2.0%
Scottsdale/Fnt Hills/CvCrk	318	59.7%	39.0%	.9%	0.3%
Sun City/Sun City West	152	69.7%	21.7%	5.9%	2.6%
Tempe/Guadalupe	263	60.5%	37.6%	1.9%	-
Southwest	77	75.6%	14.1%	10.3%	-
Northwest	32	65.6%	21.9%	12.5%	-
Maricopa County	174	78.3%	13.7%	5.7%	2.3%
Total	**4018**	64.1%	29.8%	5.2%	0.8%

Base: All households, weighted.

The majority of Maricopa County residents participating in this survey are homeowners (71%), while 29% are renters. The highest proportion of renters was in East Central Phoenix (43%).

Table H-10
Home Ownership Status

Geographic Area	N	Own	Rent	Other
Apache Junction	100	88.1%	11.9%	-
Chandler	191	70.2%	29.8%	-
Gilbert	81	71.3%	28.8%	-
Glendale	268	70.1%	29.9%	-
Mesa	536	66.2%	33.2%	0.6%
Peoria	113	82.3%	16.8%	0.9%
North Phoenix	484	74.7%	25.1%	.2%
West Central Phoenix	396	73.2%	26.5%	.3%
East Central Phoenix	633	56.2%	43.1%	.6%
South Phoenix	200	73.5%	26.0%	.5%
Scottsdale/Fnt Hills/CvCrk	318	77.0%	22.3%	.6%
Sun City/Sun City West	152	92.1%	7.9%	-
Tempe/Guadalupe	263	63.5%	36.1%	0.4%
Southwest	77	80.5%	18.2%	1.3%
Northwest	32	75.0%	25.0%	-
Maricopa County	174	82.2%	15.5%	2.3%
Total	**4018**	70.7%	28.8%	0.5%

Base: All households, weighted.

Most Maricopa County residents (44%) have lived at their current address for more than five years, while 30% reported living at their current residence for the past 1-3 years. Fourteen percent of the respondents are new to their home, having moved there within the past year. Those who have lived in their home the least (less than 1 year) were more likely to be found in Gilbert (28%) or Chandler (22%).

Table H-11
Year Moved to Current Residence

Geographic Area	N	Less than 1 Year	1 – 3 years	4 – 5 years	More than 5 years	Refused
Apache Junction	100	13.9%	34.7%	8.9%	42.6%	-
Chandler	191	22.1%	28.9%	13.2%	34.2%	1.6%
Gilbert	81	27.5%	32.5%	8.8%	31.3%	-
Glendale	268	14.2%	37.8%	11.2%	35.6%	1.1%
Mesa	536	17.9%	33.1%	11.0%	37.0%	.9%
Peoria	113	14.2%	38.1%	15.0%	31.0%	1.8%
North Phoenix	484	14.5%	29.2%	14.7%	41.0%	.6%
West Central Phoenix	396	14.9%	25.8%	7.6%	51.0%	.8%
East Central Phoenix	633	12.3%	26.7%	11.2%	49.3%	.5%
South Phoenix	200	15.0%	24.0%	11.0%	49.0%	1.0%
Scottsdale/Fnt Hills/CvCrk	318	5.0%	30.6%	8.2%	54.3%	1.9%
Sun City/Sun City West	152	9.9%	31.6%	13.8%	43.4%	1.3%
Tempe/Guadalupe	263	13.0%	31.3%	12.6%	43.1%	-
Southwest	77	15.4%	29.5%	12.8%	39.7%	2.6%
Northwest	32	15.6%	37.5%	6.3%	40.6%	-
Maricopa County	174	7.5%	27.6%	12.6%	49.4%	2.9%
Total	**4018**	13.7%	29.9%	11.2%	44.3%	1.0%

Base: All households, weighted.

Computer ownership is rising across the United States and its affect on the level of telecommuting is yet unknown. For this study, three computer-related questions were asked of each household. First, does that household own a computer? If so, does that household have Internet service and what type? Answers to these questions will help MAG better estimate the proportion of telecommuting in the region. As shown in Table H-12, 65% of households in the region own home computers. Computer ownership was highest in Gilbert, Chandler, Tempe and Peoria. It was lowest in East Central Phoenix.

Table H-12
Computer Ownership

Geographic Area	N	Yes	No
Apache Junction	100	69.3%	30.7%
Chandler	191	79.6%	20.4%
Gilbert	81	87.7%	12.3%
Glendale	268	65.2%	34.8%
Mesa	536	68.7%	31.3%
Peoria	113	78.6%	21.4%
North Phoenix	484	77.7%	22.3%
West Central Phoenix	396	47.5%	52.5%
East Central Phoenix	633	52.8%	47.2%
South Phoenix	200	54.3%	45.7%
Scottsdale/Fnt Hills/CvCrk	318	73.0%	27.0%
Sun City/Sun City West	152	64.5%	35.5%
Tempe/Guadalupe	263	80.6%	19.4%
Southwest	77	55.8%	44.2%
Northwest	32	59.4%	40.6%
Maricopa County	174	66.1%	33.9%
Total	**4018**	65.3%	34.7%

Base: All households, weighted.

Since computer ownership doesn't necessarily imply Internet access, a follow-up question was asked of all 2,650 households that reported owning home computers. Of those, 87% reported having Internet access. Those areas least likely to have Internet access were Apache Junction and West Central Phoenix.

Table H-13
Internet Access

Geographic Area	N	Yes	No
Apache Junction	69	76.8%	23.2%
Chandler	153	85.6%	14.4%
Gilbert	71	90.1%	9.9%
Glendale	174	89.7%	10.3%
Mesa	368	86.1%	13.9%
Peoria	88	89.8%	10.2%
North Phoenix	376	92.0%	8.0%
West Central Phoenix	188	78.7%	21.3%
East Central Phoenix	335	83.3%	16.7%
South Phoenix	108	88.0%	12.0%
Scottsdale/Fnt Hills/CvCrk	232	91.4%	8.6%
Sun City/Sun City West	98	85.7%	14.3%
Tempe/Guadalupe	212	92.0%	8.0%
Southwest	43	93.0%	7.0%
Northwest	20	80.0%	20.0%
Maricopa County	115	87.8%	12.2%
Total	2650	87.0%	13.0%

Base: All households reporting home computer ownership, weighted.

Those respondents with home computers and Internet service were asked how they access the Internet. Most (72%) access the Internet via a modem, while 18% use some type of high-speed access. A small proportion (2%) had Web TV. The respondents under "other" mostly referenced the Internet service provider rather than the access type (i.e., AOL or Netscape).

Table H-14
Type of Internet Access

Geographic Area	N	Modem	High Speed	Web TV	Other
Apache Junction	54	77.8%	7.4%	5.6%	9.3%
Chandler	130	63.8%	26.9%	1.5%	7.7%
Gilbert	64	78.1%	18.8%	-	3.1%
Glendale	156	73.1%	16.0%	1.9%	9.0%
Mesa	317	70.3%	20.2%	1.3%	8.2%
Peoria	79	69.6%	19.0%	2.5%	8.9%
North Phoenix	346	69.4%	22.8%	1.7%	6.1%
West Central Phoenix	147	70.7%	14.3%	2.7%	12.2%
East Central Phoenix	279	71.7%	20.4%	1.1%	6.8%
South Phoenix	94	67.0%	22.3%	1.1%	9.6%
Scottsdale/Fnt Hills/CvCrk	212	74.1%	17.5%	1.9%	6.6%
Sun City/Sun City West	85	72.9%	10.6%	3.5%	12.9%
Tempe/Guadalupe	195	82.1%	13.3%	.5%	4.1%
Southwest	39	79.5%	7.7%	-	12.8%
Northwest	16	75.0%	12.5%	6.3%	6.3%
Maricopa County	101	76.2%	12.9%	1.0%	9.9%
Total	2314	72.2%	18.3%	1.6%	7.9%

Base: All households with home computers and Internet access, weighted.

As with computers, cellular telephone ownership is also gaining in popularity. Maricopa County respondents were asked for the number of cellular telephones owned as part of this study. As shown in Table H-15, the mean number of cell phones owned was 0.89. Cellular telephone ownership was highest in Gilbert and lowest in East Central Phoenix and the Northwest portion of the county.

Table H-15
Cellular Telephone Ownership

Geographic Area	N	0	1	2	3+	Mean
Apache Junction	99	49.5%	35.4%	14.1%	1.0%	0.67
Chandler	188	35.6%	35.1%	27.1%	2.1%	0.96
Gilbert	81	12.3%	43.2%	32.1%	12.3%	1.46
Glendale	262	43.5%	36.3%	16.4%	3.8%	0.80
Mesa	529	41.8%	32.7%	21.6%	4.0%	0.89
Peoria	111	28.8%	33.3%	32.4%	5.4%	1.15
North Phoenix	478	26.8%	37.7%	26.8%	8.8%	1.21
West Central Phoenix	393	48.3%	33.1%	15.8%	2.8%	0.74
East Central Phoenix	625	54.2%	32.0%	10.7%	3.0%	0.63
South Phoenix	198	39.9%	36.4%	20.2%	3.5%	0.90
Scottsdale/Fnt Hills/CvCrk	312	33.3%	36.9%	27.6%	2.2%	0.98
Sun City/Sun City West	151	43.7%	43.0%	9.9%	3.3%	0.74
Tempe/Guadalupe	263	31.9%	41.4%	20.9%	5.7%	1.02
Southwest	77	35.1%	41.6%	22.1%	1.3%	0.92
Northwest	33	51.5%	36.4%	9.1%	3.0%	0.63
Maricopa County	169	42.0%	32.0%	20.7%	5.3%	0.92
Total	3969	40.3%	35.5%	20.0%	4.3%	0.89

Base: All households reporting cellular telephone ownership, weighted.

b. Household Trip Indicators

The household file also contains summary variables that indicate the number and types of trips reported in the trip file. This includes number of places visited on diary day and number of trips. As shown in Table H-16 the number of trips can be summarized by purpose: home-based-work (HBW), home-based-shopping (HBS), home-based other (HBO), and non-home-based (NHB). Throughout this report, these designations will be used to define specific trips as follows:

Home-based work (HBW) designates trips that begin at home and end at work or vice versa.

Home–based shopping trips (HBS) begin at home and end at a shopping location or vice versa

Home-based other trips (HBO) begin at home and end at a non-work/non-shopping location or vice versa

Non-home based trips (NHB) are those that do not begin or end at home.

Appendix E contains six additional cross tabulations of household trip rates by various household characteristics.

Geographic areas such as Apache Junction and Sun City that have large numbers of retiree's have the smallest HBW trip rates and total trip rates. The geographic area with the highest trip rate is Gilbert, which has the largest average size of households.

Table H-16
Average Daily Household Trip Rates by Place of Trip Ends

Geographic Area	N	HBW	HBS	HBO	NHB	Total trips
Apache Junction	100	0.55	1.03	2.41	1.72	5.71
Chandler	191	1.68	0.76	3.83	2.37	8.64
Gilbert	81	1.92	1.14	5.82	2.69	11.57
Glendale	268	1.42	0.64	3.53	1.69	7.28
Mesa	536	1.36	0.61	3.67	1.76	7.41
Peoria	113	1.27	0.77	3.60	2.26	7.91
North Phoenix	484	1.48	0.79	3.32	2.33	7.91
West Central Phoenix	396	1.57	0.61	3.44	1.42	7.05
East Central Phoenix	633	1.19	0.64	2.72	1.45	6.00
South Phoenix	200	1.63	0.67	4.11	1.89	8.30
Scottsdale/Fnt Hills/CvCrk	318	1.07	0.73	3.71	2.13	7.64
Sun City/Sun City West	152	0.49	0.77	2.97	1.50	5.73
Tempe/Guadalupe	263	1.57	0.61	3.38	1.99	7.55
Southwest	77	1.31	0.56	3.09	1.25	6.20
Northwest	32	0.89	0.47	2.32	0.93	4.62
Maricopa County	174	1.08	0.70	3.49	2.08	7.36
Total	**4018**	**1.33**	**0.69**	**3.42**	**1.82**	**7.26**

Base: All households, weighted.

Table H-17 shows geographical areas that had high percentages of non-motorized trips seemed to be related to high percentages of people under 18 years of age (Gilbert, West Central Phoenix, and South Phoenix) or higher percentages of multi-family dwelling units (East Central Phoenix and Tempe).

Table H-17
Average Daily Household Trip Rates by Trip Type

Geographic Area	N	Non-Motorized	% Non-Motorized	Motorized	Total Trips
Apache Junction	100	0.48	8.4	5.22	5.71
Chandler	191	0.60	6.9	8.04	8.64
Gilbert	81	1.20	10.4	10.37	11.57
Glendale	268	0.59	8.1	6.69	7.28
Mesa	536	0.61	8.2	6.78	7.41
Peoria	113	0.60	7.6	7.31	7.91
North Phoenix	484	0.46	5.8	7.45	7.91
West Central Phoenix	396	0.77	10.9	6.27	7.05
East Central Phoenix	633	0.68	11.3	5.32	6.00
South Phoenix	200	0.91	11.0	7.39	8.30
Scottsdale/Fnt Hills/CvCrk	318	0.49	6.4	7.15	7.64
Sun City/Sun City West	152	0.40	7.0	5.33	5.73
Tempe/Guadalupe	263	0.85	11.3	6.70	7.55
Southwest	77	0.46	7.4	5.74	6.20
Northwest	32	0.5	10.8	4.10	4.62
Maricopa County	174	0.49	6.7	6.87	7.36
Total	**4018**	**0.64**	**8.8**	**6.62**	**7.26**

Base: All households, weighted.

Table H-18 illustrates that trip rates the influenced of four household variables on trip rates. These variables are auto ownership, income, size, and workers. It is clear that each variable has a significant impact on trip rates**.**

Table H-18
Summary of Average Daily Household Trip Rates

Auto Ownership	HH Income	1 Person		2 Person			3+ Person			
		0 Wrkr	1 Wrkr	0 Wrkr	1 Wrkr	2+ Wrkr	0 Wrkr	1 Wrkr	2 Wrkr	3+ Wrkr
Auto 0	All Inc.	1.41	3.01	3.34	3.09	4.57*	6.59*	5.96	8.50	8.58*
Auto 1	< $20k	2.58	3.44	3.08	5.17	6.79	7.92	8.70	9.90	8.76*
	$20-<$50k	2.73	3.67	5.67	5.74	7.24	6.87*	10.32	8.87	11.15
	$50k+	3.64	4.30	6.30	7.33	6.15		11.04	12.72	12.00*
Auto 2+	< $20k	3.05*	0.59*	3.42	4.19	6.65	14.05*	8.21	9.77	9.80
	$20-<$50k	4.14	3.84	6.27	5.72	6.81	11.36*	10.38	10.97	12.26
	$50k+	3.95*	3.59	7.10	6.72	7.37	11.50*	14.03	13.21	12.83

Base: All households, weighted. *Indicates less than 10 observations. See Appendix E for related tables.

Table H-19 illustrate the trip rates for each geographic area by the number of household workers. Households with more workers tend to make more trips than households with fewer workers, however there is a significant amount of variance between geographic areas. Much of the variance in rates between areas can be attributed to household incomes and household sizes.

Table H-19
Average Daily Household Trip Rates by Workers

Geographic Area	N	0	1	2	3+	Total
Apache Junction	100	4.49	6.18	10.11	4.82*	5.71
Chandler	191	4.67	7.11	10.57	10.48	8.64
Gilbert	81	8.75*	12.59	11.61	8.19*	11.57
Glendale	268	3.83	6.46	8.96	12.84	7.28
Mesa	536	3.97	6.46	9.67	11.95	7.41
Peoria	113	4.21	9.88	9.02	9.86*	7.91
North Phoenix	484	4.84	7.32	8.52	13.17	7.91
West Central Phoenix	396	3.99	6.19	9.29	11.81	7.05
East Central Phoenix	633	3.20	5.90	8.89	11.29	6.00
South Phoenix	200	4.47	6.86	9.76	14.71	8.30
Scottsdale/Fnt Hills/CvCrk	318	4.53	7.00	10.60	15.35	7.64
Sun City/Sun City West	152	5.27	5.75	7.62	11.66*	5.73
Tempe/Guadalupe	263	4.49	6.31	9.38	12.79	7.55
Southwest	77	4.25	6.04	7.02	10.67*	6.20
Northwest	32	3.66	5.28	8.50	6.00*	4.62
Maricopa County	174	3.94	7.41	10.45	15.09*	7.36
Total	**4018**	**4.16**	**6.68**	**9.48**	**12.27**	**7.26**

Base: All households, weighted. *Indicates less than 10 observations.

Table H-20 illustrates the trips rates of households by ethnicity. There is little variance in trips rates except for African American. Further study is necessary to determine why the trip rates for African American households are lower than the average.

Table H-20
Average Daily Household Trip Rates by Household Ethnicity

Geographic Area	N	White	Hispanic	African American	Asian American	Native American	Other	Total
Total	**4018**	**7.33**	**7.47**	**5.67**	**7.25**	**7.51**	**5.79**	**7.26**

Base: All households, weighted. *Indicates less than 10 observations.

Table H-21 illustrate the trip rates for each geographic area by the household income. Higher income households make tend to make more trips than lower income households however there is a significant amount of variance between geographic areas. Much of the variance in rates between areas can be attributed to number of workers and household sizes.

Table H-21
Average Household Trip Rates by Household Income

Geographic Area	N	< $20k	$20-<$50k	$50k - <$70k	$70k+	Total
Apache Junction	100	4.91	4.96	11.05	4.96*	5.71
Chandler	191	6.42	7.55	9.38	10.37	8.64
Gilbert	81	8.90*	10.03	14.54	11.70	11.57
Glendale	268	5.01	6.12	9.20	10.54	7.28
Mesa	536	4.92	7.05	9.22	9.56	7.41
Peoria	113	6.46	7.22	8.63	9.77	7.91
North Phoenix	484	5.89	6.83	7.82	10.01	7.91
West Central Phoenix	396	5.76	6.99	8.47	9.93	7.05
East Central Phoenix	633	3.80	6.65	7.48	8.69	6.00
South Phoenix	200	4.54	8.44	10.60	11.63	8.30
Scottsdale/Fnt Hills/CvCrk	318	3.95	7.35	8.80	9.41	7.64
Sun City/Sun City West	152	4.26	5.75	6.32	7.04	5.73
Tempe/Guadalupe	263	5.50	6.47	8.59	9.69	7.55
Southwest	77	5.43	6.09	7.13*	7.19	6.20
Northwest	32	3.46*	4.66	5.69*	7.00*	4.62
Maricopa County	174	6.35	6.19	8.58	9.44	7.36
Total	**4018**	**4.96**	**6.85**	**8.78**	**9.66**	**7.26**

Base: All households, weighted. *Indicates less than 10 observations.

4.2 Person Survey Results

A total of 10,030 household members participated in the Maricopa Regional Household Travel Survey. The person data includes demographic information about the household members, student data, employment data for first and second jobs, and Internet usage both in general as well as during the travel period (if the household owned a home computer).

a. Person Demographics

The following tables show the distribution of household members by gender, age, licensed driver status, relationship to head of household, and, if disabled, whether that disability resulted in the need for a disabled parking permit. As shown in Table P-1, there was an almost equal distribution by gender in the survey respondent pool.

Table P-1
Gender of Household Members

Geographic Area	N	Male	Female	Refused
Apache Junction	188	42.8%	52.4%	4.8%
Chandler	503	49.3%	50.5%	.2%
Gilbert	263	49.4%	47.5%	3.0%
Glendale	717	46.7%	49.7%	3.6%
Mesa	1366	50.5%	46.5%	3.0%
Peoria	301	44.9%	47.8%	7.3%
North Phoenix	1221	47.3%	46.9%	5.8%
West Central Phoenix	1209	47.1%	49.5%	3.4%
East Central Phoenix	1394	46.6%	50.2%	3.2%
South Phoenix	618	45.1%	50.6%	4.2%
Scottsdale/Fnt Hills/Cv Crk	676	44.8%	51.9%	3.3%
Sun City/Sun City West	294	44.0%	54.9%	1.0%
Tempe/Guadalupe	590	47.0%	47.7%	5.3%
Southwest	219	49.3%	46.1%	4.6%
Northwest	64	44.4%	55.6%	-
Maricopa County	409	44.4%	52.9%	2.7%
Total	10030	42.8%	52.4%	4.8%

Base: All household members, weighted.

The majority of respondents (56%) were between the ages of 19 and 64. An additional 23% of participating household members were under the age of 16, while 12% were between the ages of 65 and 84. The communities of Gilbert and South Phoenix are the "youngest" in terms of age distributions, while Sun City/Sun City West, Apache Junction, and the Northwest regions were the "oldest".

Table P-2
Respondent Age

Geographic Area	N	< 16	16-18	19-64	65-84	85+	Refused
Apache Junction	188	13.8%	1.6%	37.2%	38.3%	3.2%	5.9%
Chandler	503	26.9%	5.0%	62.5%	4.4%	.2%	1.0%
Gilbert	263	33.8%	2.3%	58.6%	1.1%	1.1%	3.0%
Glendale	717	25.0%	4.2%	58.9%	7.1%	.6%	4.2%
Mesa	1366	24.2%	4.1%	57.6%	9.3%	1.2%	3.5%
Peoria	301	25.9%	1.0%	51.5%	11.3%	2.0%	8.3%
North Phoenix	1221	20.9%	3.8%	59.0%	8.9%	1.6%	5.9%
West Central Phoenix	1209	29.7%	4.5%	52.8%	8.5%	1.1%	3.4%
East Central Phoenix	1394	21.3%	2.5%	56.7%	13.9%	1.7%	3.9%
South Phoenix	618	30.6%	2.6%	55.0%	7.1%	.5%	4.2%
Scottsdale/Fnt Hills/Cv Crk	676	14.6%	3.3%	54.7%	21.9%	1.2%	4.3%
Sun City/Sun City West	294	11.2%	2.0%	37.1%	41.5%	5.4%	2.7%
Tempe/Guadalupe	590	18.8%	2.0%	66.7%	7.1%	.7%	4.6%
Southwest	219	28.8%	4.1%	52.1%	10.0%	1.8%	3.2%
Northwest	64	14.1%	4.7%	42.2%	35.9%	3.1%	-
Maricopa County	409	19.1%	4.2%	51.7%	19.6%	2.2%	3.2%
Total	10030	23.2%	3.4%	56.0%	11.9%	1.4%	4.0%

Base: All household members, weighted.

Relationship to the head of house was also obtained for all participating household members. As shown in Table P-3, the majority of respondents were related to the head of household (57%).

Table P-3
Relationship to Head of House

Geographic Area	N	Head of House	Related	Not Related	Refused
Apache Junction	188	53.2%	45.2%	1.6%	-
Chandler	503	38.0%	60.0%	1.8%	.2%
Gilbert	263	30.8%	67.7%	1.5%	-
Glendale	717	37.4%	60.4%	2.0%	.3%
Mesa	1366	39.3%	58.8%	1.8%	.1%
Peoria	301	37.5%	59.8%	2.0%	.7%
North Phoenix	1221	39.6%	57.1%	2.8%	.5%
West Central Phoenix	1209	32.8%	63.3%	2.5%	1.5%
East Central Phoenix	1394	45.4%	52.0%	2.2%	.4%
South Phoenix	618	32.3%	64.6%	2.6%	.5%
Scottsdale/Fnt Hills/Cv Crk	676	47.0%	51.0%	1.9%	-
Sun City/Sun City West	294	51.9%	47.4%	.3%	.3%
Tempe/Guadalupe	590	44.6%	50.8%	4.6%	-
Southwest	219	35.3%	63.3%	1.4%	-
Northwest	64	50.8%	47.6%	1.6%	-
Maricopa County	409	42.5%	53.8%	2.4%	1.2%
Total	10030	40.1%	57.2%	2.3%	.4%

Base: All household members, weighted.

As shown in Table P-4, most participating household members did not report any type of disability (93%). The greatest proportion of disabled respondents was in Apache Junction (11% as compared to 7% overall).

Table P-4
Disability Status

Geographic Area	N	Disabled	Not Disabled	Refused
Apache Junction	188	11.1%	88.4%	.5%
Chandler	503	4.4%	95.6%	-
Gilbert	263	1.9%	98.1%	-
Glendale	717	6.4%	92.9%	.7%
Mesa	1366	5.4%	94.2%	.4%
Peoria	301	9.3%	90.0%	.7%
North Phoenix	1221	5.7%	93.9%	.4%
West Central Phoenix	1209	6.0%	92.9%	1.2%
East Central Phoenix	1394	10.3%	89.2%	.5%
South Phoenix	618	4.4%	95.1%	.5%
Scottsdale/Fnt Hills/Cv Crk	676	8.9%	91.1%	-
Sun City/Sun City West	294	10.9%	89.1%	-
Tempe/Guadalupe	590	4.6%	95.2%	.2%
Southwest	219	2.3%	97.7%	-
Northwest	64	7.9%	92.1%	-
Maricopa County	409	7.3%	91.7%	1.0%
Total	10030	6.6%	92.9%	.5%

Base: All household members, weighted.

To help understand the disability status of the household members, each respondent that reported having a disability was asked if they had either a disabled license plate or parking permit. Of the 666 respondents reporting a disability, almost half (45%) held either a disabled license plate or parking permit.

Table P-5
Special License Plate / Parking Permit

Disabled Plate/Permit	N	Percent
Yes	299	44.8%
No	366	54.9%
Refused	2	0.3%
Total	666	100%

Base: All household members reporting disabilities (n=666), weighted.

Driver's license status was obtained for all participating household members age 16 or older. As shown in Table P-6, 88% of respondents were licensed drivers. Respondents age 16 or older that did not hold driver's licenses were most likely to be found in East Central Phoenix or West Central Phoenix (21% respectively).

Table P-6
Licensed Driver Status

Geographic Area	N	Licensed	Not Licensed	Refused
Apache Junction	162	95.7%	4.3%	-
Chandler	367	93.2%	6.8%	-
Gilbert	175	96.6%	3.4%	-
Glendale	530	84.2%	15.3%	.6%
Mesa	1021	89.8%	10.2%	-
Peoria	215	88.4%	11.6%	-
North Phoenix	957	92.7%	6.4%	.9%
West Central Phoenix	842	79.1%	20.7%	.2%
East Central Phoenix	1091	78.6%	21.1%	.4%
South Phoenix	419	82.1%	17.9%	-
Scottsdale/Fnt Hills/Cv Crk	569	93.7%	6.3%	-
Sun City/Sun City West	261	91.6%	8.4%	-
Tempe/Guadalupe	474	93.9%	5.9%	.2%
Southwest	152	86.8%	12.5%	.7%
Northwest	55	89.1%	10.9%	-
Maricopa County	324	92.0%	7.4%	.6%
Total	7614	87.6%	12.1%	.3%

Base: All household members age 16+ (n=7,614), weighted.

b. Employment Data

All respondents age 16 or older were asked about employment. Those respondents that indicated they were not employed were asked about their non-work status. All employed respondents were asked how many jobs they worked. The general employment information is shown in the following tables. As shown in Table E-1, 60% of all respondents were employed either full-time or part-time, 19% were retired, 10% were unemployed, 7% homemakers, and 4% reported they were self-employed. Unemployment was highest for respondents in West Central Phoenix (14%), and the Southwest and Northwest regions of the county (13% each).

Table E-1
Employment Status

Geographic Area	N	Employed (FT or PT)	Self Employed	Unemployed	Retired	Homemaker	Other
Apache Junction	162	35.8%	4.3%	5.6%	50.6%	3.1%	.6%
Chandler	367	74.1%	5.4%	7.9%	7.9%	3.8%	.8%
Gilbert	175	73.1%	6.3%	8.0%	4.6%	8.0%	-
Glendale	530	62.1%	3.8%	10.4%	14.0%	8.7%	1.1%
Mesa	1021	63.6%	4.0%	9.0%	15.9%	6.9%	.7%
Peoria	215	61.1%	1.9%	9.7%	19.9%	6.9%	.5%
North Phoenix	957	66.5%	4.4%	9.1%	13.6%	5.0%	1.5%
West Central Phoenix	842	57.4%	2.5%	14.4%	14.1%	10.1%	1.5%
East Central Phoenix	1091	55.7%	3.1%	11.6%	20.2%	7.6%	1.7%
South Phoenix	419	64.6%	2.9%	8.1%	12.9%	10.5%	1.0%
Scottsdale/Fnt Hills/Cv Crk	569	55.4%	4.4%	6.7%	27.6%	5.8%	.2%
Sun City/Sun City West	261	29.0%	1.2%	3.9%	61.8%	3.1%	1.2%
Tempe/Guadalupe	474	71.1%	3.6%	7.4%	12.0%	4.9%	1.1%
Southwest	152	58.9%	1.3%	13.2%	15.9%	8.6%	2.0%
Northwest	55	32.7%	1.8%	12.7%	49.1%	3.6%	-
Maricopa County	324	52.8%	1.9%	9.9%	32.1%	2.5%	.9%
Total	7614	60.0%	3.5%	9.6%	19.0%	6.7%	1.1%

Base: All household members age 16+, weighted.

Those respondents who indicated they were employed were asked how many jobs they worked. As shown in Table E-2, 94% of employed respondents worked one only job. Those respondents working two jobs were mostly found in Sun City/Sun City West and Gilbert. On average, respondents reported working 15 hours per week at their second job.

Table E-2
Number of Jobs Held

Geographic Area	N	1	2	3+	Refused
Apache Junction	65	100.0%	-	-	-
Chandler	292	96.9%	2.1%	.3%	.7%
Gilbert	139	89.9%	8.6%		1.4%
Glendale	350	93.7%	4.6%	.3%	1.4%
Mesa	689	95.6%	3.6%	.1%	.6%
Peoria	136	95.6%	2.2%	.7%	1.5%
North Phoenix	677	92.9%	4.7%	.6%	1.8%
West Central Phoenix	505	97.0%	.8%	-	2.2%
East Central Phoenix	641	93.0%	4.8%	.3%	1.9%
South Phoenix	282	94.0%	4.6%	-	1.4%
Scottsdale/Fnt Hills/Cv Crk	339	93.8%	3.5%	1.2%	1.5%
Sun City/Sun City West	79	87.3%	10.1%	1.3%	1.3%
Tempe/Guadalupe	354	93.2%	4.5%	.3%	2.0%
Southwest	91	95.6%	2.2%	-	2.2%
Northwest	19	100.0%	-	-	-
Maricopa County	178	96.1%	1.7%	.6%	1.7%
Total	4836	94.4%	3.8%	.4%	1.5%

Base: All employed household members, weighted.

c. Data on Primary Job

All respondents age 16 or older that were employed were asked a series of questions about their job. This included hours worked, work schedule, work start and end times, occupation, work location, tenure at that job, and parking costs. In addition, questions about employer benefits for parking and transit usage were asked. As shown in Table W-1, 55% of employed respondents worked between 40 and 50 hours per week. Eighteen percent of respondents worked 50 hours or more, while 20% worked less than 40 hours each week. Those respondents working the most hours were predominantly from Gilbert (27%), North Phoenix (26%), and Sun City/Sun City West (23%).

Of the 4,836 employed respondents, 258 reported that they worked from home (5%) during the recruitment interview. During the 48-hour travel period, 176 respondents (4%) actually recorded "work at home" activities. The distribution of work-at-home activities recorded during the travel period by day of week was:

Weekend (Saturday/Sunday) – 7%
Monday – 20%
Tuesday – 25%
Wednesday – 19%
Thursday – 16%
Friday – 13%

Of the 258 that reported they worked from home (during recruitment), only 73 actually reported work-at-home activities on their travel days – the remainder either didn't work or worked at a non-home location. In addition, 103 respondents reported they did not work at home at all during recruitment but reported work-at-home activities on the travel day.

Table W-1
Hours Worked at Primary Job

Geographic Area	N	Less than 30 hrs	30 - < 40 hours	40 - < 50 hours	50+ hours	Refused
Apache Junction	65	18.5%	3.1%	49.2%	20.0%	9.2%
Chandler	292	16.0%	9.2%	46.4%	19.5%	8.9%
Gilbert	139	14.6%	8.8%	43.8%	27.0%	5.8%
Glendale	350	12.9%	7.2%	53.0%	19.8%	7.2%
Mesa	689	14.9%	9.3%	57.2%	14.5%	4.2%
Peoria	136	7.4%	9.6%	58.8%	17.6%	6.6%
North Phoenix	677	10.2%	6.0%	51.8%	26.0%	6.0%
West Central Phoenix	505	8.9%	8.3%	62.4%	11.7%	8.7%
East Central Phoenix	641	9.2%	10.6%	56.9%	13.9%	9.4%
South Phoenix	282	10.6%	6.7%	61.0%	15.2%	6.4%
Scottsdale/Fnt Hills/Cv Crk	339	16.7%	9.1%	48.7%	20.5%	5.0%
Sun City/Sun City West	79	10.1%	8.9%	51.9%	22.8%	6.3%
Tempe/Guadalupe	354	13.2%	7.0%	55.5%	19.2%	5.1%
Southwest	91	10.9%	5.4%	56.5%	16.3%	10.9%
Northwest	19	-	15.8%	57.9%	15.8%	10.5%
Maricopa County	178	14.0%	5.6%	51.7%	21.3%	7.3%
Total	4836	12.1%	8.1%	54.7%	18.2%	6.8%

Base: All employed household members age 16+, weighted.

Most respondents (59%) work a fixed work schedule that doesn't vary based on the day of the week. However, 32% of the respondents reported that their work hours vary. Three percent each stated that either they had fixed start times but varying end times or fixed hours that varied based on the day of the week. Respondents from the Scottsdale/Fountain Hills/Cave Creek area were most likely to have varying work schedules.

Table W-2
Work Schedule

Geographic Area	N	Hours fixed, don't vary	Hours vary	Fixed start, end varies	Fixed hours, vary daily	Other
Apache Junction	65	56.9%	33.8%	3.1%	6.2%	-
Chandler	292	56.3%	35.5%	2.7%	3.4%	2.0%
Gilbert	139	61.6%	32.6%	-	4.3%	1.4%
Glendale	350	60.1%	29.9%	3.2%	4.3%	2.6%
Mesa	689	59.2%	30.6%	4.6%	3.8%	1.7%
Peoria	136	60.0%	28.9%	5.2%	3.0%	3.0%
North Phoenix	677	55.6%	34.4%	2.5%	2.4%	5.2%
West Central Phoenix	505	64.0%	26.3%	4.5%	1.8%	3.4%
East Central Phoenix	641	57.7%	32.1%	3.7%	3.3%	3.1%
South Phoenix	282	62.8%	30.9%	3.5%	1.4%	1.4%
Scottsdale/Fnt Hills/Cv Crk	339	54.0%	38.3%	.9%	3.5%	3.2%
Sun City/Sun City West	79	57.1%	33.8%	6.5%	1.3%	1.3%
Tempe/Guadalupe	354	57.5%	34.0%	2.3%	2.8%	3.4%
Southwest	91	59.8%	30.4%	3.3%	3.3%	3.3%
Northwest	19	57.9%	31.6%	10.5%	-	-
Maricopa County	178	56.8%	35.8%	2.8%	.6%	4.0%
Total	4836	58.6%	32.2%	3.3%	2.9%	3.0%

Base: All employed household members age 16+, weighted.

The most frequent work start times were between the hours of 6 a.m. and 9 a.m., with 63% of all employed respondents starting work during that period. The start times were fairly consistent across the region, with the exception of the Northwest region of the county. Detailed (hourly) distributions of work start times are shown in Table W-5.

Table W-3
Work Start Times - Weekdays

Geographic Area	N	Before 6 am	6 am – 9 am	9 am – 3 pm	3 pm – 6 pm	After 6 pm	Refused
Apache Junction	65	20.3%	59.4%	4.7%	3.1%	3.1%	9.4%
Chandler	292	7.5%	59.4%	15.0%	6.8%	4.4%	6.8%
Gilbert	139	5.8%	65.0%	21.9%	2.2%	2.2%	2.9%
Glendale	350	10.0%	60.2%	15.2%	4.0%	2.9%	7.7%
Mesa	689	8.8%	61.8%	14.8%	5.2%	3.3%	6.1%
Peoria	136	9.6%	65.9%	15.6%	1.5%	1.5%	5.9%
North Phoenix	677	8.7%	64.3%	13.4%	3.7%	2.5%	7.4%
West Central Phoenix	505	11.9%	64.7%	8.9%	4.2%	4.2%	6.2%
East Central Phoenix	641	9.0%	60.8%	15.9%	3.7%	4.2%	6.4%
South Phoenix	282	10.7%	69.4%	12.1%	2.1%	2.5%	3.2%
Scottsdale/Fnt Hills/Cv Crk	339	5.9%	59.4%	20.6%	2.4%	2.1%	9.7%
Sun City/Sun City West	79	7.7%	65.4%	14.1%	1.3%	3.8%	7.7%
Tempe/Guadalupe	354	5.6%	61.9%	18.9%	2.8%	4.2%	6.5%
Southwest	91	8.8%	68.1%	17.6%	3.3%	-	2.2%
Northwest	19	26.3%	47.4%	10.5%	-	10.5%	5.3%
Maricopa County	178	8.4%	60.1%	14.6%	3.9%	5.1%	7.9%
Total	4836	9.0%	62.6%	14.8%	3.8%	3.3%	6.6%

Base: All employed household members age 16+, weighted.

Forty-seven percent of all employed respondents reported ending work between 3 p.m. and 6 p.m. As shown in Table W-4, an additional 21% each ended work after 6 p.m. Detailed (hourly) distributions of work end times are shown in Table W-6.

Table W-4
Work End Times

Geographic Area	N	Before 6 am	6 am – 9 am	9 am – 3 pm	3 pm – 6 pm	After 6 pm	Refused
Apache Junction	65	21.2%	3.0%	9.1%	34.8%	18.2%	13.6%
Chandler	292	2.7%	3.1%	14.7%	48.6%	22.9%	7.9%
Gilbert	139	5.0%	5.0%	7.9%	51.8%	23.7%	6.5%
Glendale	350	6.6%	2.3%	15.8%	46.0%	21.0%	8.3%
Mesa	689	6.7%	3.5%	17.3%	45.7%	19.3%	7.5%
Peoria	136	6.7%	1.5%	11.1%	55.6%	18.5%	6.7%
North Phoenix	677	2.5%	2.9%	12.7%	47.1%	26.2%	8.5%
West Central Phoenix	505	6.3%	3.2%	20.4%	45.0%	16.5%	8.5%
East Central Phoenix	641	8.0%	3.1%	15.1%	44.6%	20.6%	8.6%
South Phoenix	282	4.9%	3.5%	21.9%	49.5%	15.9%	4.2%
Scottsdale/Fnt Hills/Cv Crk	339	3.8%	2.9%	12.1%	48.8%	21.2%	11.2%
Sun City/Sun City West	79	7.7%	6.4%	11.5%	52.6%	12.8%	9.0%
Tempe/Guadalupe	354	6.2%	3.1%	11.3%	48.0%	22.6%	8.8%
Southwest	91	2.2%	1.1%	12.1%	59.3%	22.0%	3.3%
Northwest	19	15.8%	5.3%	21.1%	36.8%	15.8%	5.3%
Maricopa County	178	8.0%	4.5%	6.3%	46.6%	24.4%	10.2%
Total	4836	5.8%	3.2%	14.7%	47.2%	20.9%	8.2%

Base: All employed household members age 16+, weighted.

Table W-5
Detailed Work Start Times

Geographic Area	Before 5	5-6 am	6-7 am	7-8 am	8-9 am	9-10 am	10-11 am	11-12 pm	12-1 pm	1-2 pm	2-3 pm	3-4 pm	4-5 pm	5-6 pm	6-7 pm	7-8 pm	8-9 pm	9-10 pm	10-11 pm	After 11 pm	Refd
Apache Junction	6.3%	14.1%	12.5%	25.0%	21.9%	3.1%	-	-	-	1.6%	-	3.1%	-	-	-	3.1%	-	-	-	-	9.4%
Chandler	3.4%	4.5%	17.8%	18.8%	22.6%	6.5%	2.7%	1.7%	1.7%	.3%	2.1%	2.7%	2.7%	1.4%	1.4%	1.4%	.7%	.3%	-	.3%	6.8%
Gilbert	1.4%	4.3%	10.1%	32.6%	21.0%	3.6%	10.9%	4.3%	1.4%	2.2%	-	-	2.2%	-	1.4%	-	-	-	1.4%		2.9%
Glendale	3.4%	6.9%	14.9%	24.6%	20.6%	7.4%	2.0%	1.1%	2.0%	1.1%	1.7%	1.7%	1.7%	.6%	1.1%	.3%	.3%	.3%	-	.6%	7.7%
Mesa	3.6%	5.2%	19.2%	18.3%	24.4%	7.4%	2.8%	.6%	.9%	1.9%	1.2%	1.0%	2.6%	1.5%	.6%	.9%	.6%	.6%	.9%	-	6.1%
Peoria	3.7%	5.9%	16.3%	25.9%	23.7%	7.4%	2.2%	1.5%	-	2.2%	2.2%	-	.7%	.7%	-	-	-	-	.7%	.7%	5.9%
North Phoenix	3.8%	4.9%	17.6%	23.6%	23.0%	7.4%	2.4%	.6%	.6%	1.3%	1.2%	1.6%	1.2%	.9%	.6%	.6%	.7%	.1%	.1%	.4%	7.4%
W. Central Phnx	4.3%	7.5%	23.3%	20.5%	20.5%	3.7%	1.2%	1.0%	1.0%	.8%	1.4%	2.0%	.6%	1.8%	.4%	.4%	1.4%	.8%	.8%	.6%	6.1%
E Central Phoenix	3.1%	5.9%	15.6%	22.1%	23.2%	8.6%	2.5%	1.2%	.9%	1.1%	1.6%	1.7%	1.1%	.9%	.6%	.9%	.6%	.6%	1.1%	.2%	6.4%
South Phoenix	3.2%	7.5%	20.6%	28.5%	20.3%	4.3%	.7%	3.2%	1.8%	.4%	1.8%	1.4%	.4%	.4%	.7%	1.1%	-	.4%	-	.4%	3.2%
Scottsdale/Fnt/Cv Crk	3.5%	2.3%	7.6%	26.6%	24.9%	11.7%	2.6%	1.8%	1.5%	2.6%	.6%	.6%	1.8%	.3%	-	.9%	.9%	-	.3%	-	9.6%
SunCity/SunCity W	1.3%	6.3%	8.8%	37.5%	18.8%	7.5%	1.3%	2.5%	-	3.8%	-	-	1.3%	-	-	1.3%	-	1.3%	1.3%	-	7.5%
Tempe/Guadalupe	2.3%	3.4%	10.8%	22.7%	28.6%	9.1%	2.8%	2.0%	1.4%	1.4%	2.0%	.6%	1.4%	.8%	.8%	1.7%	.6%	-	.8%	.3%	6.5%
Southwest	3.2%	5.3%	24.5%	25.5%	17.0%	4.3%	4.3%	6.4%	1.1%	2.1%	-	2.1%	2.1%	-	-	-	-	-	-	-	2.1%
Northwest	10.5%	15.8%	10.5%	10.5%	26.3%	5.3%	-	-	-	5.3%	-	-	-	-	-	5.3%	-	-	5.3%	-	5.3%
Maricopa County	2.8%	6.1%	9.5%	27.4%	22.9%	9.5%	1.7%	2.2%	1.1%	-	-	.6%	2.2%	1.1%	.6%	1.1%	1.1%	1.7%	.6%	-	7.8%
Total	3.4%	5.6%	16.3%	23.2%	22.9%	7.2%	2.5%	1.5%	1.1%	1.4%	1.3%	1.4%	1.5%	.9%	.6%	.8%	.6%	.4%	.6%	.3%	6.5%

Base: All employed household members age 16+, weighted.

Table W-6
Detailed Work End Times

Geographic Area	Before 5	5-6 am	6-7 am	7-8 am	8-9 am	9-10 am	10-11 am	11-12 pm	12-1 pm	1-2 pm	2-3 pm	3-4 pm	4-5 pm	5-6 pm	6-7 pm	7-8 pm	8-9 pm	9-10 pm	10-11 pm	After 11 pm	Refd
Apache Junction	6.3%	14.3%	-	3.2%	-	-	-	-	-	-	9.5%	7.9%	17.5%	9.5%	7.9%	4.8%	-	1.6%	3.2%	-	14.3%
Chandler	2.4%	.3%	2.0%	1.0%	.3%	.3%	1.0%	2.0%	2.0%	1.7%	7.5%	8.2%	15.3%	25.2%	9.5%	2.7%	2.7%	2.7%	3.4%	1.7%	7.8%
Gilbert	4.3%	1.4%	2.1%	1.4%	1.4%	4.3%	-	-	-	-	3.6%	7.9%	22.9%	20.7%	13.6%	1.4%	-	1.4%	2.9%	4.3%	6.4%
Glendale	4.6%	2.3%	.9%	1.4%	-	.6%	.9%	.6%	2.3%	3.2%	8.6%	12.0%	12.9%	20.9%	7.7%	4.6%	.9%	3.7%	2.9%	.9%	8.3%
Mesa	5.7%	1.2%	1.7%	1.3%	.4%	.3%	.3%	.9%	1.7%	4.2%	9.9%	11.5%	13.5%	20.8%	9.6%	2.3%	2.5%	2.6%	1.6%	.6%	7.5%
Peoria	5.9%	1.5%	.7%	-	.7%	-	2.2%	.7%	.7%	1.5%	5.9%	11.9%	14.8%	28.9%	10.4%	.7%	.7%	3.7%	.7%	1.5%	6.7%
North Phoenix	2.1%	1.0%	1.5%	1.0%	.4%	.1%	.1%	.4%	1.9%	2.2%	8.0%	10.2%	17.4%	19.6%	11.3%	5.9%	2.8%	2.2%	1.9%	1.3%	8.5%
W. Central Phnx	5.4%	2.0%	1.2%	1.8%	.2%	.2%	.2%	1.0%	1.8%	3.4%	14.1%	14.5%	14.5%	15.9%	6.2%	3.4%	2.4%	1.6%	1.4%	.6%	8.5%
E Central Phoenix	6.1%	2.3%	.9%	1.2%	.8%	-	-	.3%	2.7%	3.1%	9.0%	12.9%	13.4%	18.3%	8.1%	4.2%	2.0%	2.3%	1.4%	2.2%	8.6%
South Phoenix	4.9%	.7%	.7%	2.1%	.7%	-	-	.4%	1.4%	5.3%	14.8%	15.2%	15.9%	18.4%	6.4%	4.2%	1.4%	.4%	1.8%	1.1%	4.2%
Scottsdale/Fnt/Cv Crk	3.2%	.6%	.9%	1.5%	.3%	-	-	.6%	2.9%	.9%	7.9%	8.2%	12.6%	28.2%	10.0%	2.6%	1.8%	3.2%	.9%	2.4%	11.2%
SunCity/SunCity W	3.8%	3.8%	5.1%	1.3%	1.3%	-	-	3.8%	1.3%	2.5%	3.8%	11.4%	15.2%	25.3%	5.1%	6.3%	-	1.3%	-	-	8.9%
Tempe/Guadalupe	4.2%	2.0%	1.4%	1.4%	.3%	.3%	.3%	-	1.1%	4.2%	5.4%	9.6%	11.6%	26.6%	10.2%	4.8%	1.7%	2.0%	2.5%	1.7%	8.8%
Southwest	2.2%	-	1.1%	-	-	-	-	1.1%	1.1%	3.3%	6.5%	17.4%	20.7%	20.7%	9.8%	4.3%	2.2%	1.1%	2.2%	3.3%	3.3%
Northwest	15.0%	-	5.0%	-	-	-	-	-	-	5.0%	15.0%	5.0%	25.0%	5.0%	10.0%	5.0%	-	5.0%	-	-	5.0%
Maricopa County	7.3%	1.7%	.6%	2.3%	1.7%		.6%	.6%	.6%	.6%	4.0%	11.9%	15.3%	18.6%	13.0%	5.1%	1.1%	2.8%	1.7%	.6%	10.2%
Total	4.6%	1.6%	1.3%	1.4%	.5%	.3%	.3%	.7%	1.8%	2.9%	8.9%	11.4%	14.8%	20.9%	9.2%	3.9%	1.9%	2.3%	1.8%	1.4%	8.2%

Base: All employed household members age 16+, weighted.

The distribution of respondents by occupational category is shown in Table W-7. Almost one-third (29%) of the respondents reported that they were employed in a professional specialty position. Executive, administrative or managerial positions were reported by 15% of the respondents, while 9% reported working in a position described as "handler, equipment cleaner, helper or laborer."

Table W-7
Occupation

Occupation	N	Percent
EXECUTIVE, ADMIN, OR MANAGERIAL	703	14.5%
PROFESSIONAL SPECIALTY	1410	29.1%
TECHNICIAN OR RELATED SUPPORT	332	6.9%
SALES	379	7.8%
ADMINISTRATIVE SUPPORT, CLERICAL	426	8.8%
PRIVATE HOUSEHOLD	64	1.3%
PROTECTIVE SERVICES	81	1.7%
SERVICE, EXCEPT PROTECTIVE AND HOUSEHOLD	347	7.2%
FARMING, FORESTRY OR FISHING	17	.3%
PRECISION, PRODUCTION, CRAFT OR REPAIR	187	3.9%
MACHINE OPERATOR, ASSEMBLER OR INSPECTOR	130	2.7%
TRANSPORTATION OR MATERIAL MOVING	136	2.8%
HANDLER, EQUIPMENT CLEANER, HELPER OR LABORER	447	9.2%
OTHER	6	.1%
DON'T KNOW	101	2.1%
REFUSED	72	1.5%
Total	4836	100%

Base: All employed household members age 16+, weighted.

One-third of the employed respondents age 16+ reported that they have worked at their current work location for one to three years. One-fourth reported working at their current location for more than five years, while 24% report being at their current work locations for less than one year.

Table W-8
Tenure at Current Work Location

Geographic Area	N	Less than 1 Year	1 – 3 years	4 – 5 years	More than 5 years	Refused
Apache Junction	65	29.5%	29.5%	18.0%	23.0%	-
Chandler	292	25.6%	34.8%	9.9%	21.6%	8.1%
Gilbert	139	21.1%	43.8%	11.7%	18.0%	5.5%
Glendale	350	24.9%	33.6%	11.1%	23.4%	6.9%
Mesa	689	26.5%	36.5%	9.8%	20.8%	6.4%
Peoria	136	19.5%	43.1%	9.8%	24.4%	3.3%
North Phoenix	677	24.0%	31.1%	12.7%	23.1%	9.1%
West Central Phoenix	505	23.4%	31.9%	9.9%	27.1%	7.7%
East Central Phoenix	641	23.1%	31.7%	10.4%	26.4%	8.4%
South Phoenix	282	19.3%	36.1%	10.0%	24.9%	9.7%
Scottsdale/Fnt Hills/Cv Crk	339	20.9%	28.9%	10.2%	31.4%	8.6%
Sun City/Sun City West	79	13.7%	27.4%	16.4%	24.7%	17.8%
Tempe/Guadalupe	354	26.2%	32.9%	12.9%	23.5%	4.4%
Southwest	91	21.1%	31.1%	10.0%	24.4%	13.3%
Northwest	19	26.3%	26.3%	10.5%	31.6%	5.3%
Maricopa County	178	19.3%	27.1%	12.7%	28.3%	12.7%
Total	4836	23.5%	33.1%	11.0%	24.5%	7.9%

Base: All employed household members, age 16+, weighted.

Most respondents reported that they drove to work (74%), while 7% reported they rode to work as a passenger.

Table W-9
Mode to Work

Mode to Work	Frequency	Valid Percent
Driver	3401	74.3%
Passenger	334	7.3%
Walk	96	2.1%
Local or community bus service	91	2.0%
Bicycle	66	1.4%
Express bus service	22	0.5%
Vanpool service/Valley metro vanpool	24	0.5%
School bus	3	0.1%
Dial-a-ride/Paratransit	1	0.0%
Taxi	2	0.0%
Shuttle/limousine	1	0.0%
Other, (Specify)	30	0.7%
Refused	508	11.1%
Total	4579	100%

Base: All employed household members, age 16+, weighted.

Thirty percent of the respondents were aware that their employers provided parking subsidies to defray the cost of parking a vehicle at work: 28% took advantage of the subsidy and 2% did not. Sixty-four percent of the respondents indicated their employer did NOT provide a parking subsidy, while 7% did not know.

Table W-10
Employer Parking Subsidies

Geographic Area	N	Yes and use it	Yes but don't use it	No	Unknown
Apache Junction	60	16.7%	3.3%	78.3%	1.7%
Chandler	273	28.6%	3.3%	63.4%	4.8%
Gilbert	127	18.1%	2.4%	76.4%	3.1%
Glendale	334	25.4%	2.1%	65.9%	6.6%
Mesa	654	28.6%	2.6%	63.8%	5.0%
Peoria	122	23.0%	-	71.3%	5.7%
North Phoenix	637	28.9%	.9%	62.5%	7.7%
West Central Phoenix	483	26.5%	2.5%	60.7%	10.4%
East Central Phoenix	607	27.2%	3.1%	61.1%	8.6%
South Phoenix	269	27.1%	1.5%	65.4%	5.9%
Scottsdale/Fnt Hills/Cv Crk	324	34.6%	1.2%	57.7%	6.5%
Sun City/Sun City West	73	23.3%	2.7%	72.6%	1.4%
Tempe/Guadalupe	342	29.5%	1.5%	63.2%	5.8%
Southwest	89	18.0%	3.4%	70.8%	7.9%
Northwest	18	27.8%	-	61.1%	11.1%
Maricopa County	168	32.7%	3.0%	58.3%	6.0%
Total	4580	27.7%	2.1%	63.5%	6.7%

Base: All employed household members age 16+ weighted.

Table W-11
Average Monthly Amount Paid to Park at Work
by Employer Parking Subsidies

Geographic Area of Residence	N	Yes and use it	Yes but don't use it	No	Unknown
Apache Junction	-	-	-	-	-
Chandler	3	-	-	$6.50	-
Gilbert	-	-	-	-	-
Glendale	7	$67.80	-	$31.39	-
Mesa	10	$24.67	-	$23.65	-
Peoria	3	$100.00	-	$36.74	-
North Phoenix	15	-	-	$35.46	-
West Central Phoenix	11	$45.18	$20.00	$43.33	$9.00
East Central Phoenix	11	$45.00	-	$21.49	-
South Phoenix	4	$36.00	-	$36.26	-
Scottsdale/Fnt Hills/Cv Crk	13	$94.52	-	$49.71	-
Sun City/Sun City West	1	$60.00	-	-	-
Tempe/Guadalupe	11	-	-	$19.79	-
Southwest	2	$100.00	$220.00	-	-
Northwest	-	-	-	-	-
Maricopa County	1	$70.00	-	-	-
Total	91	-	-	-	-

Base: All employed household members age 16+ weighted. Excludes those respondents that reported parking was free or stated parking costs were unknown.

Unlike the knowledge of parking subsidies, only 13% of the respondents knew that their employer provided a transit subsidy. Sixty-nine percent of the respondents indicated there was no such subsidy. Eighteen percent of the respondents did not know if such a subsidy was available.

Table W-12
Employer Transit Subsidies

Geographic Area	N	Yes and use it	Yes but don't use it	No	Unknown
Apache Junction	60	1.6%	-	70.5%	27.9%
Chandler	273	4.4%	5.5%	69.6%	20.5%
Gilbert	127	4.7%	8.6%	60.9%	25.8%
Glendale	334	3.0%	8.1%	70.0%	18.9%
Mesa	654	3.2%	7.2%	73.5%	16.1%
Peoria	122	4.9%	8.1%	65.0%	22.0%
North Phoenix	637	2.4%	8.8%	66.1%	22.8%
West Central Phoenix	483	5.0%	8.9%	67.2%	18.9%
East Central Phoenix	607	5.4%	11.5%	66.2%	16.8%
South Phoenix	269	4.9%	13.8%	70.5%	10.8%
Scottsdale/Fnt Hills/Cv Crk	324	3.7%	7.1%	72.8%	16.4%
Sun City/Sun City West	73	1.4%	13.9%	75.0%	9.7%
Tempe/Guadalupe	342	3.2%	7.9%	72.7%	16.1%
Southwest	89	1.1%	10.0%	71.1%	17.8%
Northwest	18	-	-	88.9%	11.1%
Maricopa County	168	1.8%	10.8%	70.7%	16.8%
Total	4580	3.7%	8.8%	69.4%	18.1%

Base: All employed household members age 16+ weighted.

d. Student Data

All respondents were asked for the highest level of education completed. As shown in Table S-1, 35% of respondents had not yet completed High School (which accounts for most respondents under the age of 19). Twenty-seven percent completed high school, 14% had completed 2 years of college or technical school, and 14% completed 4 years of college. Tempe/Guadalupe had the most educated population, while South Phoenix had the least.

Table S-1
Level of Education Attained

Geographic Area	N	11th grade or less	Completed High School	2 years of College	4 years of College	Post-Graduate	Refused
Apache Junction	187	19.8%	44.4%	20.3%	8.0%	7.5%	-
Chandler	502	35.7%	25.1%	14.3%	16.9%	7.6%	.4%
Gilbert	263	35.4%	16.7%	20.9%	19.0%	8.0%	-
Glendale	718	38.9%	32.3%	13.4%	8.6%	4.0%	2.8%
Mesa	1365	34.9%	29.5%	14.6%	12.7%	6.7%	1.7%
Peoria	302	29.8%	29.5%	16.9%	16.2%	3.6%	4.0%
North Phoenix	1220	28.3%	27.5%	14.9%	19.1%	8.0%	2.2%
West Central Phoenix	1209	52.1%	29.2%	8.9%	4.9%	1.8%	3.1%
East Central Phoenix	1394	37.6%	26.7%	11.6%	12.8%	8.5%	2.7%
South Phoenix	619	52.7%	19.2%	8.7%	10.3%	5.5%	3.6%
Scottsdale/Fnt Hills/Cv Crk	677	19.6%	22.7%	14.3%	26.6%	14.3%	2.4%
Sun City/Sun City West	294	15.3%	30.6%	19.7%	19.4%	12.9%	2.0%
Tempe/Guadalupe	589	23.1%	21.6%	13.8%	22.4%	17.7%	1.5%
Southwest	218	46.8%	26.6%	10.6%	9.2%	3.7%	3.2%
Northwest	63	25.4%	38.1%	17.5%	14.3%	4.8%	-
Maricopa County	409	27.4%	28.1%	16.1%	15.6%	9.0%	3.7%
Total	10029	35.1%	27.2%	13.5%	14.3%	7.6%	2.3%

Base: All household members, weighted.

Over one-fourth (27%) of participating household members reported attending school. Those communities with the highest proportions of students included Gilbert and the Southwest Region (35%).

Table S-2
Student Status

Geographic Area	N	Student	Not a Student
Apache Junction	187	16.0%	84.0%
Chandler	502	27.8%	72.2%
Gilbert	263	34.6%	65.4%
Glendale	718	28.3%	71.2%
Mesa	1365	29.2%	70.6%
Peoria	302	27.2%	72.8%
North Phoenix	1220	26.3%	73.4%
West Central Phoenix	1209	27.1%	72.4%
East Central Phoenix	1394	23.1%	76.5%
South Phoenix	619	32.0%	67.8%
Scottsdale/Fnt Hills/Cv Crk	677	23.7%	76.2%
Sun City/Sun City West	294	9.9%	90.1%
Tempe/Guadalupe	589	27.6%	71.7%
Southwest	218	34.9%	65.1%
Northwest	63	15.9%	84.1%
Maricopa County	409	26.4%	73.1%
Total	10029	26.5%	73.2%

Base: All household members, weighted.

For those respondents identified as students, data was obtained on how many days the student attended classes and what mode was used to get to class. Of the 2,658 students represented in the data set, most (80%) attend school 5 days a week. Eighteen percent of the students attend less than 5 days a week. Part-time students (i.e., attending less than 5 days per week) were most likely to be found in Apache Junction (40%).

Table S-3
Number of Days Attend School

Geographic Area	N	Less than 5	5 days	More than 5	Refused
Apache Junction	30	40.0%	56.7%	-	3.3%
Chandler	140	14.3%	84.3%	-	1.4%
Gilbert	91	26.4%	71.4%	-	2.2%
Glendale	202	12.9%	85.1%	.5%	1.5%
Mesa	399	19.0%	78.4%	-	2.5%
Peoria	82	23.2%	75.6%	-	1.2%
North Phoenix	321	21.5%	75.7%	1.2%	1.6%
West Central Phoenix	328	8.5%	91.2%	-	.3%
East Central Phoenix	322	16.5%	80.4%	.3%	2.8%
South Phoenix	198	12.1%	85.9%	.5%	1.5%
Scottsdale/Fnt Hills/Cv Crk	159	28.3%	69.2%	-	2.5%
Sun City/Sun City West	29	20.7%	79.3%	-	-
Tempe/Guadalupe	163	29.4%	66.3%	-	4.3%
Southwest	76	17.1%	81.6%	-	1.3%
Northwest	10	10.0%	90.0%	-	-
Maricopa County	108	17.6%	75.9%	.9%	5.6%
Total	2658	18.2%	79.5%	.3%	2.1%

Base: All household members that attend school, weighted.

Most students went to school as a passenger (31%), while 24% drove themselves. An additional 20% took the school bus, while 16% walked.

Table S-4
Mode to School

Mode	N	Percent
Passenger in car/truck/van	799	30.7%
Driver	635	24.4%
School Bus	519	19.9%
Walk	409	15.7%
Bicycle	73	2.8%
Local or community bus service	69	2.6%
Express bus service	6	0.2%
Vanpool service/Valley Metro Vanpool	5	0.2%
Taxi/shuttle bus/limousine	4	0.2%
Motorcycle/moped	4	0.2%
Dial-A-Ride	1	0.0%
Other (specify)	8	0.3%
DK/RF	71	2.7%
Total	2604	100%

Base: All household members that attend school at a non-home location, weighted.

e. Internet Usage Data

In addition to obtaining information about home computer ownership and Internet access, all respondents in sampled households that had home computers AND Internet access were asked about their Internet habits. This was followed by questions about Internet usage during the travel period for a select group of respondents. As shown in Table I-1, of the 5,860 respondents in households with home computers and Internet access, 79% reported using the Internet (the remaining 21% of the household members didn't use the Internet). Eleven percent of the respondents with home Internet access reported their work as the primary location they accessed the Internet.

Table I-1
Primary Internet Usage Location

Geographic Area	N	Don't Use	Home	Work	School	Other	Refused
Apache Junction	103	14.6%	74.8%	8.7%	-	1.9%	-
Chandler	352	22.2%	57.4%	11.9%	3.7%	1.1%	3.7%
Gilbert	208	29.3%	51.9%	15.4%	1.0%	1.0%	1.4%
Glendale	407	22.4%	63.6%	8.1%	2.9%	.7%	2.2%
Mesa	833	18.1%	68.5%	9.1%	1.9%	1.1%	1.2%
Peoria	215	28.8%	62.8%	6.0%	1.4%	.5%	.5%
North Phoenix	912	20.8%	60.3%	12.1%	1.2%	2.1%	3.5%
West Central Phoenix	435	27.8%	59.3%	5.7%	.5%	1.1%	5.5%
East Central Phoenix	586	16.7%	65.4%	12.1%	1.9%	.9%	3.1%
South Phoenix	274	19.0%	64.6%	8.4%	.4%	1.1%	6.6%
Scottsdale/Fnt Hills/Cv Crk	497	16.7%	64.6%	13.9%	2.6%	.8%	1.4%
Sun City/Sun City West	178	23.6%	56.2%	7.3%	-	1.1%	11.8%
Tempe/Guadalupe	456	16.7%	61.6%	15.1%	1.3%	1.8%	3.5%
Southwest	111	23.4%	58.6%	9.9%	.9%	.9%	6.3%
Northwest	35	14.3%	77.1%	-	2.9%	2.9%	2.9%
Maricopa County	258	23.6%	57.8%	9.3%	5.4%	.4%	3.5%
Total	5860	20.7%	62.5%	10.6%	1.8%	1.2%	3.2%

Base: All members of households with home computers and Internet access, weighted.

Most respondents used the Internet at home for shopping (71%). Internet users at work used the Internet mainly for banking (12%), while 2% of Internet usage at schools was to research products.

Table I-2
Internet Usage Purpose by Primary Usage Location

Internet Usage Purpose	N	Home	Work	School	Other	Refused
Shopping	3616	71.2%	0.1%	-	-	-
Banking	619	0.1%	12.1%	-	-	-
Research Products	211	1.8%	0.1%	2.1%	0.1%	-
Communicating	206	3.7%	0.2%		0.1%	-
General Surfing	11	0.2%	-	-	-	-
Chat Rooms	7	0.1%	-	-	-	-
Other	346	4.2%	1.0%	0.2%	1.3%	0.1%
Refused	55	-	-	-	-	1.1%
Total	5071	81.4%	13.5%	2.3%	1.5%	1.2%

Base: All members of households with home computers and Internet access, weighted.

As a follow-up to these questions, selected respondents were asked about their Internet usage during their 48-hour travel period. These respondents included those age 18+ who reported their own travel information directly to an interviewer (as opposed to having someone else report their information). These respondents were asked for Internet usage for each travel day. On those travel days where the respondent indicated they did use the Internet, follow-up questions obtained the location at which the Internet was used and the purpose for using the Internet. As shown in Table I-3, 34% of the respondents reported using the Internet on the first travel day, while 35% reported using it on the second travel day.

Table I-3
Internet Usage on Travel Day

Used Internet	Day 1	Day 2
Yes	33.9%	35.1%
No	51.9%	51.5%
Don't remember	14.2%	13.4%

Base: All members age 18+ of households with home computers and Internet access that directly reported their travel data, weighted.

Those respondents who did use the Internet during their travel period were asked for the location at which they used the Internet. Unlike the question asked in the recruitment interview (displayed in Table I-1) that obtained primary usage location, respondents were asked for all locations at which they used the Internet. The locations were very consistent across both travel days and tracked the recruitment data displayed in Table I-1, with 69% reporting Internet usage in their homes and 29% reporting Internet usage at work.

Table I-4
Internet Usage Location on Travel Day

Internet Location	Day 1	Day 2
Home	68.6%	67.9%
Work	29.4%	29.6%
School	1.5%	1.7%
Other	0.5%	0.8%

Base: All members age 18+ of households with home computers and Internet access that directly reported their travel data, weighted.

The respondents primarily used the Internet on their travel days for communicating (31%), researching information on products or travel (30%), or general surfing (15%). This varied greatly from the purposes stated in recruitment, at which time the respondents reported using the Internet predominantly for shopping. At work, respondents reported using the Internet to research products (11%), communicating (8%), and general surfing (4%).

Table I-5
Internet Usage Purpose on Travel Day

Internet Usage Purpose	N	Home	Work	School	Other	Total
Shopping	140	3.0%	0.9%	-	-	4.0%
Banking	164	3.5%	1.1%	-	-	4.6%
Research Products	1066	17.9%	11.0%	0.8%	0.3%	30.0%
Communicating	1091	22.0%	7.8%	0.7%	0.3%	30.8%
General Surfing	541	11.4%	3.5%	0.2%	0.1%	15.3%
Chat Rooms	374	8.4%	2.1%	-	-	10.5%
Other	138	2.4%	1.4%	-	-	3.9%
Refused	34	0.7%	0.3%	-	-	1.0%
Total	3549	69.4%	28.1%	1.7%	0.8%	100%

Base: All members age 18+ of households with home computers and Internet access that directly reported their travel data, weighted.

f. Person Trip Indicators

Table P-7 indicates that males make slightly fewer trips per day than females. The difference is very small, only 0.06 trip per day (2%).

Table P-7
Average Person Trip Rates by Gender

Gender	N	Average Trip Rate	Trip Rate Day 1	Trip Rate Day 2
Male	4720	2.92	2.96	2.88
Female	5310	2.98	3.05	2.90
Total	**10030**	**2.94**	**2.99**	**2.88**

Base: All household members, weighted.

Table P-8 illustrates trip rates by respondent age. It is interesting to note that people in the "65 to 85 age" group make almost as many trips as the "19 to 64 age" group (0.46 trips per day less, 14%).

Table P-8
Average Person Trip Rates by Respondent Age

Respondent Age	N	Average Trip Rate	Trip Rate Day 1	Trip Rate Day 2
Less than 16	2331	2.36	2.39	2.33
16 to 18	344	3.04	3.04	3.03
19 to 64	5614	3.25	3.33	3.16
65 to 84	1196	2.79	2.79	2.79
85 or more	139	1.97	1.96	1.97
Refused	405	2.68	2.67	2.68
Total	**10030**	**2.94**	**2.99**	**2.88**

Base: All household members, weighted.

4.3 Vehicle Availability Results

The 4,018 Maricopa County households reported having a total of 6,589 household vehicles available. The vehicle data collected for those vehicles is shown in the following tables, and includes: vehicle year, vehicle make, vehicle model (not shown), body type and ownership status.

The fleet distribution in Maricopa County included 23% built prior to 1990, 23% built from 1990 to 1994, 37% built between 1995 and 1999, and 15% built after 1999. The older (pre-1980) vehicles were most likely to be found in East Central Phoenix (8%). The newer vehicles (2000 or later) were more likely to be found in Gilbert (20%).

Table V-1
Distribution of Vehicle Age

Geographic Area	N	Pre-1980	1980-1989	1990-1994	1995-1999	2000+	Unknown
Apache Junction	134	1.5%	11.9%	28.4%	35.8%	18.7%	3.7%
Chandler	348	3.2%	11.2%	25.6%	41.8%	16.1%	2.0%
Gilbert	159	5.7%	12.6%	14.5%	44.7%	20.1%	2.5%
Glendale	456	4.8%	21.7%	20.2%	37.5%	14.0%	1.8%
Mesa	903	4.3%	15.5%	27.0%	35.9%	14.8%	2.4%
Peoria	197	4.6%	11.2%	19.3%	46.7%	16.8%	1.5%
North Phoenix	890	4.0%	16.4%	20.9%	39.7%	17.1%	1.8%
West Central Phoenix	637	7.8%	23.7%	24.3%	30.0%	11.0%	3.1%
East Central Phoenix	853	8.4%	20.6%	26.0%	31.6%	11.5%	1.9%
South Phoenix	342	7.3%	18.1%	23.1%	37.1%	10.8%	3.5%
Scottsdale/Fnt Hills/Cv Crk	540	3.9%	15.9%	21.5%	38.7%	18.0%	2.0%
Sun City/Sun City West	199	4.0%	15.0%	19.0%	42.5%	18.5%	1.0%
Tempe/Guadalupe	447	4.0%	15.2%	26.0%	38.9%	13.9%	2.0%
Southwest	133	4.5%	23.9%	17.2%	37.3%	16.4%	.7%
Northwest	49	8.2%	26.5%	22.4%	24.5%	14.3%	4.1%
Maricopa County	302	6.6%	14.2%	22.2%	39.4%	17.5%	-
Total	6589	5.3%	17.3%	23.3%	37.0%	14.9%	2.1%

Base: All household vehicles, weighted.

The following is a distribution of vehicle. As shown in Table V-2, the most predominant vehicle make was Ford (19%), followed by Chevrolet (16%) and Toyota (9%).

Table V-2
Distribution of Vehicle Make

Vehicle Make	N	Percent
FORD	1234	18.7%
CHEVROLET	1054	16.0%
TOYOTA	562	8.5%
DODGE	493	7.5%
NISSAN	446	6.8%
HONDA	430	6.5%
BUICK	261	4.0%
PONTIAC	169	2.6%
JEEP	153	2.3%
OLDSMOBILE	150	2.3%
GMC	137	2.1%
CHRYSLER	125	1.9%
MERCURY	112	1.7%
CADILLAC	107	1.6%
GEO	95	1.4%
PLYMOUTH	95	1.4%
MAZDA	93	1.4%
SATURN	81	1.2%
VOLKSWAGEN	79	1.2%
LINCOLN	63	1.0%
MITSUBISHI	60	0.9%
ISUZU	53	0.8%
HYUNDAI	43	0.7%
LEXUS	42	0.6%
BMW	39	0.6%
INFINITI	38	0.6%
ACURA	35	0.5%
MERCEDES-BENZ	35	0.5%
SATURN	34	0.5%
VOLVO	34	0.5%
KIA	26	0.4%
SUZUKI	26	0.4%
HARLEY DAVIDSON	20	0.3%
YAMAHA	14	0.2%
KAWASAKI	7	0.1%
PORSCHE	6	0.1%
SAAB	5	0.1%
JAGUAR	4	0.1%
AUDI	3	0.0%
RANGE ROVER	3	0.0%
OTHER, SPECIFY	55	0.8%
DON'T KNOW	58	0.9%
REFUSED	10	0.1%
Total	6586	100.0

Base: All household vehicles, weighted.

Most household vehicles were automobiles (56%), while 20% were trucks, 13% SUVs, and 9% vans.

Table V-3
Distribution of Vehicle Type

Geographic Area	N	Auto	Van	SUV	Pick Up Truck	Motorcycle	Other
Apache Junction	134	57.1%	12.0%	9.0%	18.0%	.8%	3.0%
Chandler	348	55.6%	10.9%	14.0%	16.9%	1.1%	1.4%
Gilbert	159	50.3%	6.3%	17.0%	22.0%	1.9%	2.5%
Glendale	456	52.3%	7.0%	12.0%	23.4%	3.7%	1.5%
Mesa	903	57.3%	7.8%	9.1%	22.8%	2.0%	1.1%
Peoria	197	49.0%	9.1%	18.2%	20.7%	.5%	2.5%
North Phoenix	890	49.4%	8.9%	20.1%	19.8%	.8%	1.0%
West Central Phoenix	637	50.2%	10.5%	9.7%	26.4%	1.9%	1.3%
East Central Phoenix	853	59.6%	7.3%	12.2%	18.2%	.9%	1.9%
South Phoenix	342	56.3%	8.7%	10.5%	24.5%	-	-
Scottsdale/Fnt Hills/Cv Crk	540	62.0%	9.6%	14.7%	12.4%	.7%	.6%
Sun City/Sun City West	199	67.5%	8.0%	8.5%	9.5%	.5%	6.0%
Tempe/Guadalupe	447	61.3%	7.2%	12.8%	15.3%	2.2%	1.1%
Southwest	133	56.1%	9.1%	6.8%	25.8%	2.3%	-
Northwest	49	62.5%	12.5%	4.2%	14.6%	2.1%	4.2%
Maricopa County	302	53.8%	9.6%	13.0%	21.6%	.3%	1.7%
Total	6589	55.7%	8.6%	12.8%	20.0%	1.4%	1.4%

Base: All household vehicles, weighted.

The majority of household vehicles were owned (97%) rather than employer-provided (2%) or available to the household under other arrangements (1%). Peoria households were most likely to have employer-provided vehicles (3%).

Table V-4
Vehicle Ownership

Geographic Area	N	Own/ Lease	Employer Provided	Other
Apache Junction	134	98.5%	-	1.5%
Chandler	348	96.6%	2.9%	.6%
Gilbert	159	98.1%	1.9%	-
Glendale	456	97.8%	2.2%	-
Mesa	903	96.6%	2.3%	1.1%
Peoria	197	96.5%	3.0%	.5%
North Phoenix	890	96.7%	2.5%	.8%
West Central Phoenix	637	97.5%	1.6%	.9%
East Central Phoenix	853	97.2%	1.4%	1.4%
South Phoenix	342	97.1%	2.0%	.9%
Scottsdale/Fnt Hills/Cv Crk	540	97.0%	2.4%	.6%
Sun City/Sun City West	199	96.5%	.5%	3.0%
Tempe/Guadalupe	447	97.1%	2.0%	.9%
Southwest	133	97.0%	2.3%	.8%
Northwest	49	97.9%	-	2.1%
Maricopa County	302	98.0%	1.7%	.3%
Total	6589	97.1%	2.0%	.9%

Base: All household vehicles, weighted.

4.4 Travel Behavior Results

As part of the Maricopa Regional Household Travel Survey, the 4,018 participating households reported data for 78,511 places visited and 58,484 trips. The travel behavior data includes the general type of place visited, land use type of that location, activities at each place, travel modes, and arrival/departure times. For auto trips, data includes number traveling in the party and how many were household members, whether a household vehicle was used, and if travel was made on any portion of a highway. For trips made by transit, access and egress modes were recorded, as well as arrival and departure times at the bus stop. The travel data is summarized in the following tables.

As shown in Table T-1, half of all reported places visited were at the home residence, while 10% were to work locations and 5% were to school locations. Seven percent of places visited were shopping locations, while one-fourth (25%) were non-home, non-work, non-school, and non-shopping locations.

Table T-1
Place of Activities by Geography

Geographic Area	N	Home	School	Work	Shopping	Other	Out of Area
Apache Junction	1521	50.9%	2.6%	6.0%	13.9%	26.6%	.1%
Chandler	4304	50.1%	4.7%	10.8%	6.9%	26.9%	.6%
Gilbert	2394	51.4%	5.5%	9.0%	8.7%	25.0%	.3%
Glendale	5329	53.5%	6.0%	10.3%	6.4%	23.0%	.8%
Mesa	10677	52.8%	5.3%	9.9%	5.8%	25.3%	.8%
Peoria	2386	50.8%	4.9%	9.0%	7.7%	25.9%	1.8%
North Phoenix	10089	49.8%	4.3%	10.8%	7.1%	27.3%	.8%
West Central Phoenix	7995	56.6%	5.7%	10.2%	5.4%	21.2%	.9%
East Central Phoenix	10377	53.6%	4.4%	10.4%	6.7%	24.3%	.6%
South Phoenix	4553	54.3%	6.4%	9.9%	6.0%	22.8%	.5%
Scottsdale/Fnt Hills/Cv Crk	6210	49.0%	3.4%	8.8%	7.6%	30.5%	.8%
Sun City/Sun City West	2327	51.4%	1.8%	4.7%	10.1%	30.9%	1.0%
Tempe/Guadalupe	5155	50.3%	4.7%	12.2%	6.7%	25.7%	.5%
Southwest	1392	58.1%	6.2%	9.1%	6.0%	20.1%	.5%
Northwest	426	56.7%	4.4%	8.2%	7.5%	23.0%	.2%
Maricopa County	3376	50.1%	4.5%	8.9%	7.9%	27.8%	.8%
Total	78511	52.3%	4.8%	9.9%	6.9%	25.4%	.7%

Base: All places visited, weighted.

The places visited varied based on the day of week that travel was recorded. Shopping trips were higher on Saturdays and Sundays, while school and work trips were higher on weekdays.

Table T-2
Place of Activity by Day of Week

Day of Week	N	Home	School	Work	Shopping	Other	Out of Area
Sunday	3936	54.9%	.9%	2.9%	10.5%	29.9%	.9%
Monday	13656	51.9%	5.1%	10.8%	7.0%	24.6%	.6%
Tuesday	16478	52.3%	5.1%	11.0%	6.1%	24.9%	.6%
Wednesday	14638	52.6%	5.2%	10.9%	6.0%	24.8%	.5%
Thursday	14380	52.9%	5.6%	10.6%	5.7%	24.6%	.7%
Friday	11769	50.6%	5.0%	9.4%	7.4%	26.7%	1.0%
Saturday	3653	52.2%	1.5%	4.1%	12.7%	28.3%	1.3%
Total	78511	52.2%	4.8%	9.9%	6.9%	25.4%	.7%

Base: All places visited, weighted.

Twelve percent of activities reported were for family/personal business and an additional 12% were for work purposes. North Phoenix and Tempe/Guadalupe respondents reported the highest proportion of work trips (14% each), while South Phoenix and Southwest region respondents reported the highest proportion of school trips (6%). Peoria respondents reported family/personal business at 18% of locations visited, while Apache Junction respondents reported eating at 6% and shopping at 14% of their locations. Note that while Tables T-1 and T-3 share similarly named categories (work, school, shopping), the data vary. This is because the activities as shown in Table T-3 can take place at multiple locations (e.g., respondents can work at home, at their work location, or attend a work-related meeting at a third location – of which only the work at work location is reflected under "work" in Table T-1).

Table T-3
Major Activities Reported by Geography

Geographic Area	N	Work	School	Family/ Personal	Eat	Shopping	Other
Apache Junction	1521	7.2%	2.4%	12.2%	6.2%	13.9%	58.1%
Chandler	4304	13.3%	5.0%	13.8%	3.5%	6.9%	57.5%
Gilbert	2394	10.0%	5.0%	13.2%	4.0%	8.7%	59.2%
Glendale	5329	12.5%	5.9%	13.0%	2.8%	6.4%	59.4%
Mesa	10677	12.2%	5.7%	12.4%	3.1%	5.8%	60.8%
Peoria	2386	11.8%	4.9%	17.5%	3.8%	7.7%	54.4%
North Phoenix	10089	14.4%	4.9%	12.9%	3.7%	7.1%	57.0%
West Central Phoenix	7995	11.5%	5.9%	12.0%	2.5%	5.4%	62.7%
East Central Phoenix	10377	12.9%	4.6%	11.3%	3.3%	6.7%	61.3%
South Phoenix	4553	11.7%	6.5%	10.8%	3.0%	6.0%	62.0%
Scottsdale/Fnt Hills/Cv Crk	6210	11.8%	3.4%	12.9%	4.0%	7.6%	60.3%
Sun City/Sun City West	2327	6.7%	1.8%	11.6%	4.3%	10.1%	65.4%
Tempe/Guadalupe	5155	14.2%	4.7%	12.4%	3.4%	6.7%	58.5%
Southwest	1392	10.3%	6.4%	10.4%	2.5%	6.0%	64.5%
Northwest	426	8.7%	4.7%	11.3%	1.9%	7.5%	66.0%
Maricopa County	3376	11.8%	5.0%	11.4%	4.1%	7.9%	59.6%
Total	78511	12.2%	5.0%	12.4%	3.4%	6.9%	60.1%

Base: All places visited, weighted.

A total of 176 respondents reported working at home during their 48-hour travel period (4%). The respondents were distributed throughout the study area.

The major activities reported by day of week parallel the place of activities reported in Table T-2. As shown below, work and school activities were mainly reported on weekdays, while shopping activities were higher on the weekends. Note that as with Tables T-1 and T-3, the categories in Tables T-2 and T-4 are similarly named, but Table T-2 refers to an actual designated location while Table T-4 refers to the activity (which can take place at multiple locations).

Table T-4
Major Activities Reported by Day of Week

Day of Week	N	Work	School	Family/ Personal	Eat	Shopping	Other
Sunday	3936	3.6%	.9%	9.4%	4.6%	10.5%	71.0%
Monday	13656	13.7%	5.4%	12.4%	2.9%	7.0%	58.6%
Tuesday	16478	13.8%	5.4%	12.3%	2.9%	6.1%	59.5%
Wednesday	14638	13.3%	5.4%	12.8%	3.0%	6.0%	59.6%
Thursday	14380	12.9%	5.9%	12.4%	3.2%	5.7%	59.9%
Friday	11769	11.4%	4.9%	13.6%	4.4%	7.4%	58.2%
Saturday	3653	4.9%	1.6%	10.5%	5.2%	12.7%	65.1%
Total	78511	12.2%	5.0%	12.4%	3.4%	6.9%	60.1%

Base: All places visited, weighted.

Tables T-5 (a, b, c) through T-8 (a, b, c) illustrate the travel between geographic areas, by trip type. The “a” version of each table provides the percentage of origin trips between each geographic area. For example the first row of table T-5a shows the percentage of work trips that come from Apache Junction and go to the other areas (5.1% of the work trips that originate in Apache Junction are destined for Chandler).

The “b” version of each table provides the percentage of destination trips between each geographic area to each geographical area. For example the first row of table T-5b shows the percentage of work trips that arrive in Apache Junction from other areas (0.7% of the work trips that end in Apache Junction come from Chandler).

Finally, the “c” version of each table provides the percentage of total trips between each geographic area. For example the first row of table T-5c shows the percentage of regional work trips that go between Apache Junction and other areas (0.1% of the regional work trips are between Apache Junction and East Phoenix).

Table T-5a
Origins and Destinations for Home-based Work Trips – Summarized by Origin

	Destination																	
Origin	Apache Junction	Chandler	Gilbert	Glendale	Mesa	Peoria	North Phoenix	West Central Phoenix	East Central Phoenix	South Phoenix	Scotts/ Fnt Hills/ Cv Crk	Sun City/ S Cty Wt	Tempe/ Guad	SW	NW	Rest of County	Out of Area	Total
Apache Junction	21.5%	5.1%	3.8%	-	38.0%	-	-	-	11.4%	5.1%	5.1%	-	8.9%	-	-	1.3%	-	100.0%
Chandler	.7%	35.2%	3.9%	1.0%	15.4%	.3%	3.0%	2.5%	7.0%	4.5%	3.0%	.3%	17.3%	.5%	-	4.9%	.5%	100.0%
Gilbert	1.1%	7.5%	13.6%	1.1%	23.8%	.4%	6.8%	.4%	7.2%	6.4%	3.4%	-	17.0%	1.5%	-	6.4%	3.4%	100.0%
Glendale	-	1.0%	.5%	26.5%	1.6%	8.6%	17.3%	16.0%	15.0%	1.8%	1.5%	2.8%	1.8%	2.6%	1.0%	1.5%	.5%	100.0%
Mesa	1.6%	7.3%	5.1%	.7%	48.6%	-	2.6%	1.4%	8.4%	3.1%	3.4%	-	14.7%	.2%	-	2.3%	.4%	100.0%
Peoria	-	-	.5%	20.1%	1.0%	13.4%	16.3%	12.4%	19.6%	3.3%	1.9%	3.8%	3.3%	1.0%	-	2.4%	1.0%	100.0%
North Phoenix	-	1.3%	1.3%	7.0%	2.5%	2.3%	31.7%	11.5%	20.8%	2.8%	12.1%	1.1%	3.2%	.7%	.7%	1.1%	-	100.0%
West Central Phoenix	-	1.5%	.1%	8.8%	1.9%	2.7%	15.3%	27.2%	23.8%	3.2%	3.1%	1.5%	3.5%	3.5%	.7%	1.2%	1.9%	100.0%
East Central Phoenix	.2%	1.9%	1.5%	4.9%	5.1%	1.6%	14.0%	12.3%	37.4%	5.7%	6.8%	.6%	4.4%	1.2%	.3%	1.8%	.2%	100.0%
South Phoenix	.7%	4.9%	3.0%	1.6%	6.9%	.9%	6.5%	6.2%	22.0%	31.4%	3.5%	-	10.1%	1.2%	.5%	.5%	-	100.0%
Scottsdale/Fnt Hills/Cv Ck	.5%	2.2%	1.3%	.9%	5.3%	.3%	17.5%	3.7%	17.4%	2.9%	36.9%	.5%	6.7%	.3%	.1%	3.3%	-	100.0%
Sun City/Sun City West	-	1.6%	-	13.1%	-	10.7%	13.1%	12.3%	10.7%	1.6%	3.3%	13.9%	-	3.3%	16.4%	-	-	100.0%
Tempe/Guadalupe	.5%	11.5%	4.2%	1.4%	16.0%	.5%	4.6%	3.5%	10.9%	5.7%	4.5%	.2%	33.4%	.9%	.4%	1.7%	.2%	100.0%
Southwest	-	1.6%	2.1%	9.0%	2.1%	1.1%	5.3%	19.0%	11.1%	3.7%	1.1%	2.1%	4.2%	24.9%	1.1%	9.0%	2.6%	100.0%
Northwest	-	-	-	9.2%	-	2.6%	9.2%	11.8%	3.9%	3.9%	2.6%	21.1%	6.6%	2.6%	18.4%	7.9%	-	100.0%
Remainder of County	.4%	13.6%	7.4%	4.1%	11.5%	2.9%	5.8%	5.3%	17.3%	1.6%	11.1%	.8%	7.4%	5.3%	2.9%	-	2.5%	100.0%
Out of Area	-	5.0%	15.0%	5.0%	8.3%	3.3%	-	31.7%	6.7%	-	-	-	6.7%	6.7%	-	11.7%	-	100.0%
Total	.6%	5.8%	2.7%	5.7%	11.8%	2.0%	12.9%	9.8%	19.5%	5.4%	7.7%	1.1%	9.7%	1.8%	.8%	2.2%	.6%	100.0%

Base: All trips that have one end at home and one end at work location and for which both trip ends were geocoded (n=10,692).

Table T-5b
Origins and Destinations for Home-based Work Trips – Summarized by Destination

	Destination																	
Origin	Apache Junction	Chandler	Gilbert	Glendale	Mesa	Peoria	North Phoenix	West Central Phoenix	East Central Phoenix	South Phoenix	Scotts/ Fnt Hills/ Cv Crk	Sun City/ S Cty Wt	Tempe/ Guad	SW	NW	Rest of County	Out of Area	Total
Apache Junction	27.4%	.7%	1.1%	-	2.5%	-	-	-	.4%	.7%	.5%	-	.7%	-	-	.4%	-	.8%
Chandler	6.5%	34.9%	8.3%	1.0%	7.5%	.9%	1.4%	1.5%	2.1%	4.8%	2.3%	1.8%	10.3%	1.6%	-	12.8%	5.3%	5.8%
Gilbert	4.8%	3.3%	13.0%	.5%	5.2%	.5%	1.4%	.1%	.9%	3.0%	1.1%		4.5%	2.2%	-	7.5%	15.8%	2.6%
Glendale	-	1.0%	1.1%	27.6%	.8%	24.6%	7.9%	9.6%	4.5%	2.0%	1.1%	14.9%	1.1%	8.7%	7.7%	4.0%	5.3%	5.9%
Mesa	32.3%	14.8%	22.4%	1.5%	48.6%	-	2.4%	1.7%	5.1%	6.8%	5.3%	-	17.9%	1.6%	-	12.3%	8.8%	11.8%
Peoria	-	-	.4%	7.2%	.2%	13.3%	2.6%	2.6%	2.0%	1.3%	.5%	7.0%	.7%	1.1%	-	2.2%	3.5%	2.0%
North Phoenix	-	3.0%	6.5%	16.4%	2.9%	14.7%	32.7%	15.6%	14.2%	6.8%	20.9%	13.2%	4.4%	4.9%	11.5%	6.6%	-	13.3%
West Central Phoenix	-	2.5%	.4%	15.1%	1.6%	12.8%	11.5%	26.7%	11.8%	5.7%	3.9%	13.2%	3.5%	19.0%	9.0%	5.3%	33.3%	9.7%
East Central Phoenix	6.5%	6.2%	10.8%	16.4%	8.1%	15.2%	20.5%	23.6%	36.4%	20.0%	16.6%	10.5%	8.6%	13.0%	6.4%	15.9%	5.3%	18.9%
South Phoenix	6.5%	4.7%	6.1%	1.5%	3.2%	2.4%	2.8%	3.4%	6.2%	31.8%	2.5%	-	5.7%	3.8%	3.8%	1.3%	-	5.5%
Scottsdale/Fnt Hills/Cv Ck	6.5%	2.8%	3.6%	1.2%	3.3%	.9%	10.0%	2.8%	6.6%	3.9%	35.2%	3.5%	5.1%	1.1%	1.3%	11.0%	-	7.3%
Sun City/Sun City West	-	.3%	-	2.7%	-	6.2%	1.2%	1.5%	.6%	.4%	.5%	14.9%		2.2%	25.6%	-	-	1.2%
Tempe/Guadalupe	8.1%	19.3%	15.2%	2.4%	13.3%	2.4%	3.5%	3.4%	5.5%	10.4%	5.7%	1.8%	33.9%	4.9%	5.1%	7.5%	3.5%	9.8%
Southwest	-	.5%	1.4%	2.9%	.3%	.9%	.8%	3.5%	1.0%	1.3%	.3%	3.5%	.8%	25.5%	2.6%	7.5%	8.8%	1.8%
Northwest	-	-	-	1.2%	-	.9%	.5%	.9%	.1%	.5%	.3%	14.0%	.5%	1.1%	17.9%	2.6%	-	.7%
Remainder of County	1.6%	5.5%	6.5%	1.7%	2.3%	3.3%	1.1%	1.3%	2.1%	.7%	3.4%	1.8%	1.8%	7.1%	9.0%	-	10.5%	2.4%
Out of Area	-	.5%	3.2%	.5%	.4%	.9%	-	1.9%	.2%	-	-	-	.4%	2.2%	-	3.1%	-	.6%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Base: All trips that have one end at home and one end at work location and for which both trip ends were geocoded (n=10,692).

Table T-5c
Origins and Destinations for Home-based Work Trips

	Destination																	
Origin	Apache Junction	Chandler	Gilbert	Glendale	Mesa	Peoria	North Phoenix	West Central Phoenix	East Central Phoenix	South Phoenix	Scotts/ Fnt Hills/ Cv Crk	Sun City/ S Cty Wt	Tempe/ Guad	SW	NW	Rest of County	Out of Area	Total
Apache Junction	.2%	.0%	.0%		.3%				.1%	.0%	.0%		.1%			.0%		.8%
Chandler	.0%	2.0%	.2%	.1%	.9%	.0%	.2%	.1%	.4%	.3%	.2%	.0%	1.0%	.0%		.3%	.0%	5.8%
Gilbert	.0%	.2%	.3%	.0%	.6%	.0%	.2%	.0%	.2%	.2%	.1%		.4%	.0%		.2%	.1%	2.6%
Glendale		.1%	.0%	1.6%	.1%	.5%	1.0%	.9%	.9%	.1%	.1%	.2%	.1%	.2%	.1%	.1%	.0%	5.9%
Mesa	.2%	.9%	.6%	.1%	5.7%		.3%	.2%	1.0%	.4%	.4%		1.7%	.0%		.3%	.0%	11.8%
Peoria			.0%	.4%	.0%	.3%	.3%	.3%	.4%	.1%	.0%	.1%	.1%	.0%		.0%	.0%	2.0%
North Phoenix		.2%	.2%	.9%	.3%	.3%	4.2%	1.5%	2.8%	.4%	1.6%	.1%	.4%	.1%	.1%	.1%		13.3%
West Central Phoenix		.1%	.0%	.9%	.2%	.3%	1.5%	2.6%	2.3%	.3%	.3%	.1%	.3%	.3%	.1%	.1%	.2%	9.7%
East Central Phoenix	.0%	.4%	.3%	.9%	1.0%	.3%	2.6%	2.3%	7.1%	1.1%	1.3%	.1%	.8%	.2%	.0%	.3%	.0%	18.9%
South Phoenix	.0%	.3%	.2%	.1%	.4%	.0%	.4%	.3%	1.2%	1.7%	.2%		.6%	.1%	.0%	.0%		5.5%
Scottsdale/Fnt Hills/Cv Ck	.0%	.2%	.1%	.1%	.4%	.0%	1.3%	.3%	1.3%	.2%	2.7%	.0%	.5%	.0%	.0%	.2%		7.3%
Sun City/Sun City West		.0%		.2%		.1%	.2%	.1%	.1%	.0%	.0%	.2%		.0%	.2%			1.2%
Tempe/Guadalupe	.0%	1.1%	.4%	.1%	1.6%	.0%	.5%	.3%	1.1%	.6%	.4%	.0%	3.3%	.1%	.0%	.2%	.0%	9.8%
Southwest		.0%	.0%	.2%	.0%	.0%	.1%	.3%	.2%	.1%	.0%	.0%	.1%	.5%	.0%	.2%	.0%	1.8%
Northwest				.1%		.0%	.1%	.1%	.0%	.0%	.0%	.2%	.0%	.0%	.1%	.1%		.7%
Remainder of County	.0%	.3%	.2%	.1%	.3%	.1%	.1%	.1%	.4%	.0%	.3%	.0%	.2%	.1%	.1%		.1%	2.4%
Out of Area		.0%	.1%	.0%	.0%	.0%		.2%	.0%				.0%	.0%		.1%		.6%
Total	.6%	5.8%	2.7%	5.7%	11.8%	2.0%	12.9%	9.8%	19.5%	5.4%	7.7%	1.1%	9.7%	1.8%	.8%	2.2%	.6%	100.0%

Base: All trips that have one end at home and one end at work location and for which both trip ends were geocoded (n=10,692).

Table T-6a
Origins and Destinations for Home-based Shopping Trips – Summarized by Origin

	Destination																	
Origin	Apache Junction	Chandler	Gilbert	Glendale	Mesa	Peoria	North Phoenix	West Central Phoenix	East Central Phoenix	South Phoenix	Scotts/ Fnt Hills/ Cv Crk	Sun City/ S Cty Wt	Tempe/ Guad	SW	NW	Rest of County	Out of Area	Total
Apache Junction	86.8%	-	.6%	-	10.3%	-	-	-	-	-	-	-	-	-	-	1.7%	.6%	100.0%
Chandler	-	56.9%	11.8%	-	7.2%	-	-	1.6%	-	5.9%	.3%	-	8.2%	3.9%	-	3.9%	-	100.0%
Gilbert	-	20.3%	37.9%	-	30.8%	-	-	-	-	2.2%	.5%	-	2.7%	1.6%	-	3.8%	-	100.0%
Glendale	-	-	-	52.3%	-	8.5%	10.9%	18.4%	1.1%	-	-	2.7%	.3%	.3%	1.3%	4.3%	-	100.0%
Mesa	4.1%	2.9%	6.9%	-	74.9%	-	-	-	.1%	.4%	1.2%	-	4.7%	.1%	-	4.1%	.4%	100.0%
Peoria	-	-	-	17.1%	-	42.5%	6.3%	2.4%	-	-	-	17.9%	-	-	4.4%	9.5%	-	100.0%
North Phoenix	-	-	.3%	4.2%	.3%	1.6%	72.0%	2.3%	8.1%	.9%	8.3%	.4%	-	-	.1%	1.3%	-	100.0%
West Central Phoenix	-	.4%		10.8%	-	1.9%	4.2%	59.3%	18.4%	.8%	.4%	.6%	-	1.5%	-	1.5%	-	100.0%
East Central Phoenix	-	-	-	1.5%	.1%	.1%	4.9%	8.7%	77.9%	1.6%	3.1%	-	1.6%	-	-	.5%	-	100.0%
South Phoenix	-	6.6%	2.5%	-	1.7%	-	.8%	1.7%	4.5%	72.7%	1.2%	-	7.4%	-	-	.8%	-	100.0%
Scottsdale/Fnt Hills/Cv Ck	.4%	-	-	.2%	2.1%	-	14.4%	.2%	3.3%	.4%	73.9%	-	1.5%	-	-	3.6%	-	100.0%
Sun City/Sun City West	-	-	-	2.2%	-	22.5%	1.1%	-	-	-	-	57.7%	-	-	15.4%	1.1%	-	100.0%
Tempe/Guadalupe	.6%	7.8%	1.4%	.8%	11.1%	-	.3%	.8%	2.8%	5.6%	2.8%	-	64.9%	.8%	-	.3%	-	100.0%
Southwest	-	14.3%		1.2%	4.8%	-	-	9.5%	-	-	1.2%	-	1.2%	50.0%	-	17.9%	-	100.0%
Northwest	-	-	-	8.5%	-	16.9%	1.7%	-	-	-		54.2%	-	-	11.9%	6.8%	-	100.0%
Remainder of County	3.5%	6.1%	.9%	7.0%	21.9%	14.0%	7.0%	2.6%	6.1%	-	14.0%	5.3%	1.8%	7.9%	.9%	.9%	-	100.0%
Out of Area	27.8%	22.2%	11.1%	5.6%	16.7%	-	-	-	5.6%	-	-	-	11.1%	-	-	-	-	100.0%
Total	3.5%	5.4%	3.1%	6.4%	13.1%	4.1%	12.5%	8.4%	14.9%	4.4%	9.2%	3.7%	6.1%	1.4%	1.0%	2.8%	.1%	100.0%

Base: All trips that have one end at home and one end at a shopping location and for which both trip ends were geocoded (n=5,588).

Table T-6b
Origins and Destinations for Home-based Shopping Trips – Summarized by Destination

	Destination																	
Origin	Apache Junction	Chandler	Gilbert	Glendale	Mesa	Peoria	North Phoenix	West Central Phoenix	East Central Phoenix	South Phoenix	Scotts/ Fnt Hills/ Cv Crk	Sun City/ S Cty Wt	Tempe/ Guad	SW	NW	Rest of County	Out of Area	Total
Apache Junction	77.8%	-	.6%	-	2.5%	-	-	-	-	-	-	-	-	-	-	1.9%	25.0%	3.1%
Chandler	-	57.7%	20.9%	-	3.0%	-	-	1.1%	-	7.3%	.2%	-	7.3%	15.4%	-	7.7%	-	5.5%
Gilbert	-	12.3%	40.1%	-	7.7%	-	-	-	-	1.6%	.2%	-	1.5%	3.8%	-	4.5%	-	3.3%
Glendale	-	-	-	55.4%	-	14.1%	5.9%	14.8%	.5%	-	-	4.9%	.3%	1.3%	9.4%	10.3%	-	6.7%
Mesa	15.5%	7.0%	29.1%	-	74.5%	-	-	-	.1%	1.2%	1.8%	-	9.9%	1.3%	-	19.2%	75.0%	13.0%
Peoria	-	-	-	12.1%	-	47.1%	2.3%	1.3%	-	-	-	22.1%	-	-	20.8%	15.4%	-	4.5%
North Phoenix	-	-	1.2%	8.2%	.3%	4.8%	70.5%	3.4%	6.6%	2.4%	11.2%	1.5%	-	-	1.9%	5.8%	-	12.3%
West Central Phoenix	-	.7%	-	14.4%	-	4.0%	2.9%	60.1%	10.5%	1.6%	.4%	1.5%	-	9.0%	-	4.5%	-	8.5%
East Central Phoenix	-	-	-	3.4%	.1%	.4%	5.7%	15.2%	76.7%	5.3%	4.9%	-	3.8%	-	-	2.6%	-	14.7%
South Phoenix	-	5.3%	3.5%	-	.5%	-	.3%	.9%	1.3%	71.5%	.6%	-	5.3%	-	-	1.3%	-	4.4%
Scottsdale/Fnt Hills/Cv Ck	1.0%	-	-	.3%	1.5%	-	10.7%	.2%	2.1%	.8%	75.5%	-	2.3%	-	-	12.2%	-	9.4%
Sun City/Sun City West	-	-	-	1.1%	-	18.1%	.3%	-	-	-	-	51.5%	-	-	52.8%	1.3%	-	3.3%
Tempe/Guadalupe	1.0%	9.3%	2.9%	.8%	5.5%	-	.1%	.6%	1.2%	8.1%	2.0%		68.1%	3.8%		.6%	-	6.5%
Southwest	-	4.0%	-	.3%	.5%	-	-	1.7%	-	-	.2%		.3%	53.8%		9.6%	-	1.5%
Northwest	-	-	-	1.4%	-	4.4%	.1%	-	-	-		15.7%			13.2%	2.6%	-	1.1%
Remainder of County	2.1%	2.3%	.6%	2.3%	3.4%	7.0%	1.1%	.6%	.8%	-	3.1%	2.9%	.6%	11.5%	1.9%	.6%	-	2.0%
Out of Area	2.6%	1.3%	1.2%	.3%	.4%	-	-	-	.1%	-	-	-	.6%	-	-	-	-	.3%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Base: All trips that have one end at home and one end at a shopping location and for which both trip ends were geocoded (n=5,588).

Table T-6c
Origins and Destinations for Home-based Shopping Trips

	Destination																	
Origin	Apache Junction	Chandler	Gilbert	Glendale	Mesa	Peoria	North Phoenix	West Central Phoenix	East Central Phoenix	South Phoenix	Scotts/ Fnt Hills/ Cv Crk	Sun City/ S Cty Wt	Tempe/ Guad	SW	NW	Rest of County	Out of Area	Total
Apache Junction	2.7%		.0%		.3%											.1%	.0%	3.1%
Chandler		3.1%	.6%		.4%			.1%		.3%	.0%		.4%	.2%		.2%		5.5%
Gilbert		.7%	1.2%		1.0%					.1%	.0%		.1%	.1%		.1%		3.3%
Glendale				3.5%		.6%	.7%	1.2%	.1%			.2%	.0%	.0%	.1%	.3%		6.7%
Mesa	.5%	.4%	.9%		9.8%				.0%	.1%	.2%		.6%	.0%		.5%	.1%	13.0%
Peoria				.8%		1.9%	.3%	.1%				.8%			.2%	.4%		4.5%
North Phoenix			.0%	.5%	.0%	.2%	8.8%	.3%	1.0%	.1%	1.0%	.1%			.0%	.2%		12.3%
West Central Phoenix		.0%		.9%		.2%	.4%	5.0%	1.6%	.1%	.0%	.1%		.1%		.1%		8.5%
East Central Phoenix				.2%	.0%	.0%	.7%	1.3%	11.4%	.2%	.4%		.2%			.1%		14.7%
South Phoenix		.3%	.1%		.1%		.0%	.1%	.2%	3.2%	.1%		.3%			.0%		4.4%
Scottsdale/Fnt Hills/Cv Ck	.0%			.0%	.2%		1.3%	.0%	.3%	.0%	6.9%		.1%			.3%		9.4%
Sun City/Sun City West				.1%		.7%	.0%					1.9%			.5%	.0%		3.3%
Tempe/Guadalupe	.0%	.5%	.1%	.1%	.7%		.0%	.1%	.2%	.4%	.2%		4.2%	.1%		.0%		6.5%
Southwest		.2%		.0%	.1%			.1%			.0%		.0%	.8%		.3%		1.5%
Northwest				.1%		.2%	.0%					.6%			.1%	.1%		1.1%
Remainder of County	.1%	.1%	.0%	.1%	.4%	.3%	.1%	.1%	.1%		.3%	.1%	.0%	.2%	.0%	.0%		2.0%
Out of Area	.1%	.1%	.0%	.0%	.1%				.0%				.0%					.3%
Total	3.5%	5.4%	3.1%	6.4%	13.1%	4.1%	12.5%	8.4%	14.9%	4.4%	9.2%	3.7%	6.1%	1.4%	1.0%	2.8%	.1%	100.0%

Base: All trips that have one end at home and one end at a shopping location and for which both trip ends were geocoded (n=5,588).

Table T-7a
Origins and Destinations for Home-based Other Trips – Summarized by Origin

	Destination																	
Origin	Apache Junction	Chandler	Gilbert	Glendale	Mesa	Peoria	North Phoenix	West Central Phoenix	East Central Phoenix	South Phoenix	Scotts/ Fnt Hills/ Cv Crk	Sun City/ S Cty Wt	Tempe/ Guad	SW	NW	Rest of County	Out of Area	Total
Apache Junction	47.1%	.8%	1.6%	-	40.3%	-	-	-	3.0%	-	-	-	1.9%	-	-	4.4%	.8%	100.0%
Chandler	-	61.3%	2.2%	.3%	9.7%	.1%	.9%	.3%	1.3%	4.6%	.9%	-	11.1%	2.7%	-	4.2%	.6%	100.0%
Gilbert	.8%	5.5%	63.9%	1.0%	19.2%	-	.2%	-	1.0%	.3%	1.2%	-	3.4%	.2%	-	2.9%	.3%	100.0%
Glendale	-	.1%	.5%	51.1%	.4%	6.3%	10.9%	15.9%	5.6%	.5%	.5%	3.0%	1.0%	1.0%	.4%	2.7%	.1%	100.0%
Mesa	3.7%	3.3%	4.4%	-	71.6%	-	.9%	.5%	2.4%	.7%	1.3%	.1%	6.6%	.2%	-	3.4%	.9%	100.0%
Peoria	-	-	-	16.7%	.5%	49.6%	4.9%	2.6%	3.1%	.6%	.5%	11.1%	.1%	1.1%	3.4%	5.7%	.2%	100.0%
North Phoenix	-	.5%	-	8.1%	1.0%	1.6%	56.8%	4.6%	13.2%	1.2%	10.5%	.4%	.6%	.3%	-	.7%	.4%	100.0%
West Central Phoenix	-	.2%	-	12.0%	.7%	1.1%	6.5%	58.9%	14.9%	1.4%	.2%	.6%	.6%	1.2%	.4%	1.1%	.3%	100.0%
East Central Phoenix	.1%	.5%	.1%	2.8%	2.1%	.5%	9.9%	9.3%	62.6%	3.0%	4.6%	.4%	2.3%	.5%	.1%	1.0%	.2%	100.0%
South Phoenix	-	4.2%	.2%	.6%	1.4%	.3%	2.4%	3.0%	9.1%	66.1%	.8%	.1%	10.8%	-	-	.4%	.4%	100.0%
Scottsdale/Fnt Hills/Cv Ck	-	.6%	.5%	.4%	2.8%	.3%	11.7%	.4%	8.3%	.3%	66.5%	.1%	3.7%	-	.0%	3.7%	.7%	100.0%
Sun City/Sun City West	-	.4%	-	6.3%	-	13.8%	1.7%	1.7%	2.0%	.1%	-	56.4%	.4%	.5%	11.9%	3.7%	1.2%	100.0%
Tempe/Guadalupe	.3%	7.4%	1.5%	1.0%	14.0%	.1%	1.6%	.7%	4.1%	7.5%	4.2%	.1%	56.5%	.3%	-	.5%	.3%	100.0%
Southwest	-	7.8%	.6%	3.8%	1.5%	2.1%	1.3%	6.4%	3.8%	1.5%	-	.4%	2.8%	54.4%	.2%	11.2%	2.1%	100.0%
Northwest	-	-	-	2.6%	-	10.1%	-	4.8%	.9%	-	1.3%	38.8%	-	.4%	28.6%	12.3%	-	100.0%
Remainder of County	2.5%	9.1%	3.9%	8.8%	19.7%	6.7%	4.5%	4.2%	4.8%	1.7%	11.8%	3.9%	.7%	8.5%	4.5%	.4%	4.2%	100.0%
Out of Area	2.8%	1.4%	4.2%	2.8%	15.5%	3.5%	4.9%	4.2%	5.6%	6.3%	12.0%	-	5.6%	9.2%	-	21.8%	-	100.0%
Total	1.3%	5.4%	3.5%	7.3%	14.8%	3.1%	10.9%	9.1%	14.6%	5.3%	8.9%	2.8%	7.4%	1.7%	.9%	2.5%	.6%	100.0%

Base: All trips that have one end at home and one end at a non-work/ non-shopping location and for which both trip ends were geocoded (n=27,395).

Table T-7b
Origins and Destinations for Home-based Other Trips – Summarized by Destination

	Destination																	
Origin	Apache Junction	Chandler	Gilbert	Glendale	Mesa	Peoria	North Phoenix	West Central Phoenix	East Central Phoenix	South Phoenix	Scotts/ Fnt Hills/ Cv Crk	Sun City/ S Cty Wt	Tempe/ Guad	SW	NW	Rest of County	Out of Area	Total
Apache Junction	48.1%	.2%	.6%	-	3.7%	-	-	-	.3%	-	-	-	.3%	-	-	2.4%	1.9%	1.4%
Chandler	-	61.7%	3.4%	.2%	3.5%	.1%	.4%	.2%	.5%	4.7%	.5%	-	8.1%	8.2%	-	9.0%	5.7%	5.4%
Gilbert	2.2%	3.7%	67.2%	.5%	4.7%	-	.1%	-	.3%	.2%	.5%	-	1.7%	.4%	-	4.3%	1.9%	3.6%
Glendale	-	.1%	1.1%	50.7%	.2%	14.5%	7.3%	12.7%	2.8%	.7%	.4%	7.6%	1.0%	4.0%	3.3%	7.9%	.6%	7.2%
Mesa	40.6%	9.1%	18.7%	-	71.1%	-	1.2%	.7%	2.4%	1.9%	2.2%	.7%	13.0%	1.5%	-	19.9%	22.8%	14.6%
Peoria	-	-	-	7.2%	.1%	49.7%	1.4%	.9%	.7%	.4%	.2%	12.3%	.0%	1.9%	11.9%	7.1%	1.3%	3.1%
North Phoenix	-	1.0%	-	12.1%	.7%	5.5%	57.2%	5.5%	9.9%	2.5%	13.0%	1.7%	.9%	1.9%	-	2.9%	8.2%	10.9%
West Central Phoenix	-	.3%	-	14.9%	.4%	3.2%	5.4%	59.0%	9.3%	2.5%	.2%	1.8%	.7%	6.1%	4.5%	4.1%	4.4%	9.1%
East Central Phoenix	1.4%	1.4%	.3%	5.4%	2.0%	2.4%	13.1%	14.8%	61.5%	8.3%	7.5%	1.8%	4.4%	4.0%	1.6%	5.9%	4.4%	14.4%
South Phoenix	-	4.1%	.3%	.5%	.5%	.5%	1.2%	1.7%	3.3%	65.9%	.5%	.3%	7.7%	-	-	.9%	3.8%	5.2%
Scottsdale/Fnt Hills/Cv Ck	-	1.0%	1.3%	.5%	1.7%	.9%	9.7%	.4%	5.1%	.5%	67.3%	.4%	4.5%	-	.4%	13.2%	10.1%	9.0%
Sun City/Sun City West	-	.2%	-	2.5%	-	12.8%	.4%	.5%	.4%	.1%	-	57.7%	.1%	.8%	38.1%	4.3%	5.7%	2.9%
Tempe/Guadalupe	1.7%	10.1%	3.1%	1.0%	7.0%	.2%	1.1%	.5%	2.1%	10.4%	3.4%	.3%	56.0%	1.1%	-	1.3%	3.8%	7.3%
Southwest	-	2.5%	.3%	.9%	.2%	1.2%	.2%	1.2%	.5%	.5%	-	.3%	.6%	54.2%	.4%	7.8%	6.3%	1.7%
Northwest	-	-	-	.3%	-	2.7%	-	.4%	.1%	-	.1%	11.5%	-	.2%	26.6%	4.1%	-	.8%
Remainder of County	5.0%	4.5%	3.0%	3.2%	3.5%	5.7%	1.1%	1.2%	.9%	.8%	3.5%	3.7%	.2%	12.9%	13.1%	.4%	19.0%	2.6%
Out of Area	1.1%	.1%	.6%	.2%	.5%	.6%	.2%	.2%	.2%	.6%	.7%	-	.4%	2.7%	-	4.6%	-	.5%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Base: All trips that have one end at home and one end at a non-work/ non-shopping location and for which both trip ends were geocoded (n=27,395).

Table T-7c
Origins and Destinations for Home-based Other Trips

	Destination																	
Origin	Apache Junction	Chandler	Gilbert	Glendale	Mesa	Peoria	North Phoenix	West Central Phoenix	East Central Phoenix	South Phoenix	Scotts/ Fnt Hills/ Cv Crk	Sun City/ S Cty Wt	Tempe/ Guad	SW	NW	Rest of County	Out of Area	Total
Apache Junction	.6%	.0%	.0%		.5%				.0%				.0%			.1%	.0%	1.4%
Chandler		3.3%	.1%	.0%	.5%	.0%	.0%	.0%	.1%	.2%	.0%		.6%	.1%		.2%	.0%	5.4%
Gilbert	.0%	.2%	2.3%	.0%	.7%		.0%		.0%	.0%	.0%		.1%	.0%		.1%	.0%	3.6%
Glendale		.0%	.0%	3.7%	.0%	.5%	.8%	1.2%	.4%	.0%	.0%	.2%	.1%	.1%	.0%	.2%	.0%	7.2%
Mesa	.5%	.5%	.6%		10.5%		.1%	.1%	.4%	.1%	.2%	.0%	1.0%	.0%		.5%	.1%	14.6%
Peoria				.5%	.0%	1.6%	.2%	.1%	.1%	.0%	.0%	.3%	.0%	.0%	.1%	.2%	.0%	3.1%
North Phoenix		.1%		.9%	.1%	.2%	6.2%	.5%	1.4%	.1%	1.2%	.0%	.1%	.0%		.1%	.0%	10.9%
West Central Phoenix		.0%		1.1%	.1%	.1%	.6%	5.4%	1.4%	.1%	.0%	.1%	.1%	.1%	.0%	.1%	.0%	9.1%
East Central Phoenix	.0%	.1%	.0%	.4%	.3%	.1%	1.4%	1.3%	9.0%	.4%	.7%	.1%	.3%	.1%	.0%	.1%	.0%	14.4%
South Phoenix		.2%	.0%	.0%	.1%	.0%	.1%	.2%	.5%	3.5%	.0%	.0%	.6%			.0%	.0%	5.2%
Scottsdale/Fnt Hills/Cv Ck		.1%	.0%	.0%	.3%	.0%	1.1%	.0%	.7%	.0%	6.0%	.0%	.3%		.0%	.3%	.1%	9.0%
Sun City/Sun City West		.0%		.2%		.4%	.0%	.0%	.1%	.0%		1.6%	.0%	.0%	.3%	.1%	.0%	2.9%
Tempe/Guadalupe	.0%	.5%	.1%	.1%	1.0%	.0%	.1%	.0%	.3%	.5%	.3%	.0%	4.1%	.0%		.0%	.0%	7.3%
Southwest		.1%	.0%	.1%	.0%	.0%	.0%	.1%	.1%	.0%		.0%	.0%	.9%	.0%	.2%	.0%	1.7%
Northwest				.0%		.1%		.0%	.0%		.0%	.3%		.0%	.2%	.1%		.8%
Remainder of County	.1%	.2%	.1%	.2%	.5%	.2%	.1%	.1%	.1%	.0%	.3%	.1%	.0%	.2%	.1%	.0%	.1%	2.6%
Out of Area	.0%	.0%	.0%	.0%	.1%	.0%	.0%	.0%	.0%	.0%	.1%		.0%	.0%		.1%		.5%
Total	1.3%	5.4%	3.5%	7.3%	14.8%	3.1%	10.9%	9.1%	14.6%	5.3%	8.9%	2.8%	7.4%	1.7%	.9%	2.5%	.6%	100.0%

Base: All trips that have one end at home and one end at a non-work/ non-shopping location and for which both trip ends were geocoded (n=27,395).

Table T-8a
Origins and Destinations for Non-Home-based Trips – Summarized by Origin

	Destination																	
Origin	Apache Junction	Chandler	Gilbert	Glendale	Mesa	Peoria	North Phoenix	West Central Phoenix	East Central Phoenix	South Phoenix	Scotts/ Fnt Hills/ Cv Crk	Sun City/ S Cty Wt	Tempe/ Guad	SW	NW	Rest of County	Out of Area	Total
Apache Junction	79.9%				16.6%		.6%						.6%				2.4%	100.0%
Chandler		57.1%	8.2%	.2%	10.3%		.7%	.4%	2.0%	5.0%	1.5%		13.4%	.1%			1.1%	100.0%
Gilbert	.2%	10.7%	48.4%	.5%	26.1%		.7%	.2%	3.7%	.5%	2.0%		5.2%				1.7%	100.0%
Glendale		.3%	.3%	55.3%	.8%	9.3%	10.6%	9.0%	8.1%	.7%	1.6%	1.2%	.7%	.9%	.2%	.6%	.2%	100.0%
Mesa	1.5%	4.7%	6.4%	.6%	71.2%	.1%	.5%	.8%	3.3%	.7%	2.2%		6.8%			.2%	1.0%	100.0%
Peoria		.4%	.2%	15.4%	.2%	55.6%	5.4%	3.3%	5.2%	.4%	.8%	8.3%	1.9%	.4%	1.5%		1.2%	100.0%
North Phoenix	.1%	.3%	.2%	6.5%	.4%	2.3%	53.8%	6.8%	14.7%	.8%	8.9%	.5%	2.7%	.8%		.9%	.5%	100.0%
West Central Phoenix		.9%		11.5%	1.6%	2.7%	6.7%	46.2%	22.4%	1.5%	1.2%	.5%	1.5%	2.3%	.2%	.5%	.3%	100.0%
East Central Phoenix	.1%	1.3%	.6%	3.2%	2.6%	1.0%	7.5%	6.9%	62.4%	3.0%	4.8%	.2%	4.4%	.3%	.1%	.5%	1.2%	100.0%
South Phoenix		6.9%	1.0%	1.2%	1.7%	.2%	3.0%	3.0%	13.4%	52.8%	1.7%		11.1%	1.3%	.8%		2.0%	100.0%
Scottsdale/Fnt Hills/Cv Ck		1.5%	.6%	.9%	2.3%	.3%	9.6%	.3%	8.0%	.7%	68.2%		3.5%	.2%	.1%	2.9%	.7%	100.0%
Sun City/Sun City West				8.1%		17.9%		3.7%	.7%			59.3%			10.3%			100.0%
Tempe/Guadalupe	.2%	5.9%	1.6%	.5%	9.0%	.5%	1.6%	.7%	9.1%	5.5%	5.4%		58.9%	.1%		.1%	.8%	100.0%
Southwest				4.3%	1.1%	2.7%	2.7%	10.1%	4.8%	2.1%	.5%			66.0%	1.6%	.5%	3.7%	100.0%
Northwest		1.3%		2.6%	3.9%	9.1%	.6%	2.6%	3.2%	1.9%	1.3%	16.9%	1.3%	1.9%	51.9%		1.3%	100.0%
Remainder of County			.9%	5.5%	5.5%		8.3%	1.8%	15.6%	2.8%	36.7%		2.8%	1.8%		17.4%	.9%	100.0%
Out of Area	.4%	2.8%	.7%	2.8%	7.0%		4.6%		11.6%		1.4%		2.1%	1.4%	2.1%	.7%	62.3%	100.0%
Total	1.2%	5.5%	3.1%	6.8%	13.0%	3.7%	9.3%	6.3%	19.7%	4.1%	10.5%	1.8%	9.7%	1.4%	1.0%	.8%	2.1%	100.0%

Base: All trips that have no ends at home and for which both trip ends were geocoded (n=14,810).

Table T-8b
Origins and Destinations for Non-Home-based Trips – Summarized by Destination

	Destination																	
Origin	Apache Junction	Chandler	Gilbert	Glendale	Mesa	Peoria	North Phoenix	West Central Phoenix	East Central Phoenix	South Phoenix	Scotts/ Fnt Hills/ Cv Crk	Sun City/ S Cty Wt	Tempe/ Guad	SW	NW	Rest of County	Out of Area	Total
Apache Junction	78.5%	-	-	-	1.5%	-	.1%	-	-	-	-	-	.1%	-	-	-	1.3%	1.2%
Chandler	-	57.1%	14.7%	.2%	4.4%	-	.4%	.3%	.6%	6.8%	.8%	-	7.7%	.5%	-	-	2.9%	5.5%
Gilbert	.6%	5.3%	43.5%	.2%	5.5%	-	.2%	.1%	.5%	.3%	.5%	-	1.5%	-	-	-	2.2%	2.8%
Glendale	-	.4%	.7%	53.3%	.4%	16.3%	7.4%	9.4%	2.7%	1.2%	1.0%	4.2%	.5%	4.5%	1.4%	5.4%	.6%	6.5%
Mesa	16.9%	11.2%	27.7%	1.2%	72.2%	.4%	.7%	1.6%	2.2%	2.4%	2.7%	-	9.3%	-	-	3.6%	6.1%	13.2%
Peoria	-	.2%	.2%	8.1%	.1%	53.0%	2.1%	1.9%	.9%	.3%	.3%	16.6%	.7%	1.0%	5.8%	-	1.9%	3.6%
North Phoenix	.6%	.5%	.4%	8.7%	.3%	5.5%	52.1%	9.7%	6.7%	1.9%	7.7%	2.7%	2.6%	5.0%	-	10.8%	1.9%	9.1%
West Central Phoenix	-	1.0%	-	10.8%	.8%	4.6%	4.6%	46.9%	7.2%	2.4%	.7%	1.9%	1.0%	10.6%	1.4%	4.5%	1.0%	6.4%
East Central Phoenix	1.2%	5.0%	3.8%	9.8%	4.1%	5.3%	16.7%	22.7%	65.4%	15.1%	9.6%	1.9%	9.5%	5.0%	2.2%	13.5%	11.2%	20.7%
South Phoenix	-	5.1%	1.3%	.7%	.5%	.2%	1.3%	2.0%	2.8%	53.3%	.7%	-	4.7%	4.0%	3.6%	-	3.8%	4.1%
Scottsdale/Fnt Hills/Cv Ck	-	2.9%	2.0%	1.3%	1.8%	.9%	10.8%	.5%	4.3%	1.9%	68.2%	-	3.8%	1.5%	1.4%	40.5%	3.5%	10.5%
Sun City/Sun City West	-	-	-	2.2%	-	9.0%	-	1.1%	.1%	-	-	62.5%	-	-	20.1%	-	-	1.9%
Tempe/Guadalupe	1.7%	10.2%	4.9%	.7%	6.6%	1.3%	1.6%	1.1%	4.4%	12.9%	4.8%	-	57.9%	1.0%	-	1.8%	3.5%	9.5%
Southwest	-	-	-	.8%	.1%	.9%	.4%	2.1%	.3%	.7%	.1%	-	-	62.3%	2.2%	.9%	2.2%	1.3%
Northwest	-	.2%	-	.4%	.3%	2.6%	.1%	.4%	.2%	.5%	.1%	10.0%	.1%	1.5%	57.6%		.6%	1.1%
Remainder of County	-	-	.2%	.6%	.3%	-	.7%	.2%	.6%	.5%	2.6%	-	.2%	1.0%	-	17.1%	.3%	.7%
Out of Area	.6%	1.0%	.4%	.8%	1.1%	-	1.0%	-	1.1%	-	.3%	-	.4%	2.0%	4.3%	1.8%	56.7%	2.0%
Total	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%

Base: All trips that have no ends at home and for which both trip ends were geocoded (n=14,810).

Table T-8c
Origins and Destinations for Non-Home-based Trips

	Destination																	
Origin	Apache Junction	Chandler	Gilbert	Glendale	Mesa	Peoria	North Phoenix	West Central Phoenix	East Central Phoenix	South Phoenix	Scotts/ Fnt Hills/ Cv Crk	Sun City/ S Cty Wt	Tempe/ Guad	SW	NW	Rest of County	Out of Area	Total
Apache Junction	.9%				.2%		.0%						.0%				.0%	1.2%
Chandler		3.2%	.5%	.0%	.6%		.0%	.0%	.1%	.3%	.1%		.7%	.0%			.1%	5.5%
Gilbert	.0%	.3%	1.3%	.0%	.7%		.0%	.0%	.1%	.0%	.1%		.1%				.0%	2.8%
Glendale		.0%	.0%	3.6%	.1%	.6%	.7%	.6%	.5%	.0%	.1%	.1%	.0%	.1%	.0%	.0%	.0%	6.5%
Mesa	.2%	.6%	.9%	.1%	9.4%	.0%	.1%	.1%	.4%	.1%	.3%		.9%			.0%	.1%	13.2%
Peoria		.0%	.0%	.5%	.0%	2.0%	.2%	.1%	.2%	.0%	.0%	.3%	.1%	.0%	.1%		.0%	3.6%
North Phoenix	.0%	.0%	.0%	.6%	.0%	.2%	4.9%	.6%	1.3%	.1%	.8%	.0%	.2%	.1%		.1%	.0%	9.1%
West Central Phoenix		.1%		.7%	.1%	.2%	.4%	3.0%	1.4%	.1%	.1%	.0%	.1%	.1%	.0%	.0%	.0%	6.4%
East Central Phoenix	.0%	.3%	.1%	.7%	.5%	.2%	1.6%	1.4%	12.9%	.6%	1.0%	.0%	.9%	.1%	.0%	.1%	.2%	20.7%
South Phoenix		.3%	.0%	.0%	.1%	.0%	.1%	.1%	.5%	2.2%	.1%		.5%	.1%	.0%		.1%	4.1%
Scottsdale/Fnt Hills/Cv Ck		.2%	.1%	.1%	.2%	.0%	1.0%	.0%	.8%	.1%	7.2%		.4%	.0%	.0%	.3%	.1%	10.5%
Sun City/Sun City West				.2%		.3%		.1%	.0%			1.1%			.2%			1.9%
Tempe/Guadalupe	.0%	.6%	.2%	.0%	.9%	.0%	.2%	.1%	.9%	.5%	.5%		5.6%	.0%		.0%	.1%	9.5%
Southwest				.1%	.0%	.0%	.0%	.1%	.1%	.0%	.0%			.9%	.0%	.0%	.0%	1.3%
Northwest		.0%		.0%	.0%	.1%	.0%	.0%	.0%	.0%	.0%	.2%	.0%	.0%	.5%		.0%	1.1%
Remainder of County			.0%	.0%	.0%		.1%	.0%	.1%	.0%	.3%		.0%	.0%		.1%	.0%	.7%
Out of Area	.0%	.1%	.0%	.1%	.1%		.1%		.2%		.0%		.0%	.0%	.0%	.0%	1.2%	2.0%
Total	1.2%	5.5%	3.1%	6.8%	13.0%	3.7%	9.3%	6.3%	19.7%	4.1%	10.5%	1.8%	9.7%	1.4%	1.0%	.8%	2.1%	100.0%

Base: All trips that have no ends at home and for which both trip ends were geocoded (n=14,810).

All reported activities at all places visited (including the anchor Place 1) are shown in Table T-9. The most frequently reported activity was work, followed by shopping. The same held true for those activities associated with travel (Table T-10).

Table T-9
Reported Activities at All Places Visited

Activity	Frequency	Percent	Avg. Trip Length
Work/regular volunteer work	7620	9.4%	31.68
Shopping	5463	6.8%	13.87
School	3557	4.4%	18.30
Drop off or get dropped off	3274	4.1%	17.08
Eat meal	2893	3.6%	15.20
Other personal business	2438	3.0%	20.02
Pick up or get picked up	2355	2.9%	15.77
Visit friends/relatives	2127	2.6%	23.10
Work-related	1930	2.4%	24.92
ATM, buy gas, quick stops	1091	1.4%	17.67
Banking, post office, pay bills	1035	1.3%	12.32
Fitness activity	1009	1.3%	16.68
Medical	889	1.1%	21.54
Church, temple, religious meeting	763	0.9%	16.15
Change mode of transportation	731	0.9%	25.75
With another person at their acts	641	0.8%	17.10
Entertainment	612	0.8%	20.93
Recreational	389	0.5%	50.49
Other school activities	367	0.5%	16.28
Work at home	268	0.3%	15.75
Childcare	232	0.3%	28.69
Occasional volunteer work	164	0.2%	15.22
Community meetings/civic	104	0.1%	14.13
Shop from home	10	0.0%	4.00
Other	97	0.9%	22.77
All other at home activities	40005	49.6%	20.12

Base: All reported activities (n=80,711– multiple response allowed). (Includes all activities reported at all places, including Place 1), weighted.

Table T-10
Distribution of Trip Purposes

Activity	Weekday	Saturday	Sunday	Total
Work or regular volunteering	13.6%	5.3%	3.3%	12.7%
Shopping	8.6%	17.8%	14.5%	9.3%
School	6.6%	1.8%	1.0%	6.1%
Drop off or get dropped off	5.8%	3.8%	3.2%	5.6%
Eat meal	4.7%	7.6%	6.8%	4.9%
Pick up or get picked up	4.2%	2.8%	2.4%	4.0%
Visit friends/relatives	2.8%	5.7%	6.2%	3.1%
Work-related	3.4%	1.1%	0.9%	3.1%
Other personal business	2.8%	3.4%	2.6%	2.9%
ATM, buy gas, quick stop	1.8%	2.9%	2.8%	1.9%
Banking, post office, pay bills	1.9%	1.2%	0.7%	1.8%
Fitness activity	1.7%	2.0%	1.7%	1.7%
Medical	1.6%	0.1%	0.1%	1.5%
Church, temple, religious meeting	0.7%	2.8%	10.5%	1.3%
Change mode of transportation	1.3%	1.6%	0.3%	1.2%
With another person at their acts	1.1%	1.1%	0.8%	1.1%
Entertainment	0.8%	3.8%	2.0%	1.0%
Other school activities	0.6%	0.5%	0.3%	0.6%
Recreational	0.4%	1.2%	1.7%	0.5%
Childcare	0.4%	0.0%	0.1%	0.4%
Occasional volunteer work	0.3%	0.3%	0.3%	0.3%
Work at home	0.3%	0.1%	0.0%	0.2%
Community meetings/civic	0.2%	0.1%	0.1%	0.2%
Shop from home	0.0%	0.0%	0.0%	0.0%
Other	1.0%	0.9%	0.6%	1.0%
All other at home activities	36.4%	35.5%	39.3%	36.5%
Total	103.0%	103.4%	102.2%	102.9%

Base: All trip-related activities (n=60165– multiple response allowed). (Excludes all activities reported at Place 1). Columns total greater than 100% as multiple responses allowed.

Eighty-seven percent of all trips were made by auto (63% driver, 24% passenger). Walk trips accounted for 7% of the mode share, while transit (local bus) was one percent (Table T-11).

Table T-11
Distribution of Travel Modes

Travel Mode	Frequency	Percent	Duration (minutes)
Auto – driver	36683	62.8%	21.02
Auto – passenger	14195	24.3%	19.15
Walk	4302	7.4%	13.32
School bus	1806	3.1%	25.15
Bicycle	645	1.1%	19.56
Local Bus	449	0.8%	42.28
Taxi	90	0.2%	38.67
Express Bus	56	0.1%	48.05
Vanpool	47	0.1%	39.53
Shuttle/Limo	38	0.1%	25.56
Dial-a-ride	22	0.0%	23.95
Motorcycle/moped	3	0.0%	35.63
Other	116	0.2%	97.91
Total	**58484**	**100.0%**	**20.48**

Base: All reported travel modes, weighted.

The majority of transit trips were made by households in West Central Phoenix, while walk trips were predominantly in the Southwest Region (Table T-12).

Table T-12
Major Travel Modes by Home Location

Geographic Area	N	Auto-Driver	Auto-Pass	Transit	Walk	Bike	Other
Apache Junction	1145	63.3%	25.2%	-	7.6%	.8%	3.1%
Chandler	3300	64.9%	24.8%	.1%	5.7%	1.1%	3.4%
Gilbert	1869	55.0%	32.5%	.9%	8.7%	1.7%	1.3%
Glendale	3899	60.8%	25.9%	.4%	7.2%	.9%	4.7%
Mesa	7949	62.2%	25.4%	.6%	6.9%	1.1%	3.8%
Peoria	1785	60.9%	28.8%	.4%	6.7%	.8%	2.4%
North Phoenix	7654	67.9%	23.5%	1.6%	10.7%	.8%	6.4%
West Central Phoenix	5583	56.0%	27.0%	1.7%	9.1%	1.0%	4.3%
East Central Phoenix	7593	61.2%	20.6%	.5%	5.5%	.3%	2.6%
South Phoenix	3316	56.1%	26.6%	.5%	5.3%	1.2%	3.4%
Scottsdale/Fnt Hills/Cv Crk	4858	67.9%	22.0%	-	7.3%	2.2%	3.8%
Sun City/Sun City West	1742	69.3%	21.2%	.6%	1.9%	.5%	.6%
Tempe/Guadalupe	3977	66.7%	19.5%	1.1%	7.7%	3.3%	1.6%
Southwest	957	61.3%	22.3%	-	21.4%	-	-
Northwest	299	67.2%	16.4%	-	-	-	-
Maricopa County	2558	63.1%	27.5%	-	5.4%	.8%	2.9%
Total	58484	62.7%	24.3%	.9%	7.4%	1.1%	3.7%

Base: All trips, weighted.

The following tables (T-13, T-14, T-15 and T-16) show the distribution of major travel modes by geography for specific trip types: home-based work, home-based shopping, home-based other, and non-home based.

Table T-13
Major Travel Modes by Home Location for Home-based Work Trips

Geographic Area	N	Auto-Driver	Auto-Pass	Transit	Walk	Bike	Other
Apache Junction	110	91.8%	8.2%	-	-	-	-
Chandler	641	87.8%	9.0%	-	2.2%	.9%	-
Gilbert	310	94.2%	2.3%	-	3.5%	-	-
Glendale	758	85.4%	11.7%	.5%	.9%	1.1%	.4%
Mesa	1464	86.5%	9.4%	.9%	2.5%	.5%	.1%
Peoria	287	94.1%	3.1%	-	1.4%	.7%	.7%
North Phoenix	1431	88.2%	9.4%	.6%	1.4%	.3%	.1%
West Central Phoenix	1245	77.8%	15.8%	2.9%	1.8%	1.4%	.2%
East Central Phoenix	1508	76.9%	13.5%	4.3%	2.9%	1.8%	.7%
South Phoenix	650	82.0%	14.5%	.8%	2.2%	.2%	.5%
Scottsdale/Fnt Hills/Cv Crk	680	88.4%	8.4%	.1%	1.2%	1.9%	-
Sun City/Sun City West	150	89.3%	7.3%	-	-	3.3%	-
Tempe/Guadalupe	826	84.7%	7.5%	1.1%	1.3%	5.1%	.2%
Southwest	201	82.6%	13.9%	-	1.5%	-	2.0%
Northwest	58	87.9%	5.2%	-	-	-	6.9%
Maricopa County	375	90.7%	6.7%	-	1.1%	1.6%	-
Total	10692	84.7%	10.5%	1.3%	1.9%	1.3%	.3%

Base: All home-based work trips, weighted.

Table T-14
Major Travel Modes by Home Location for Home-based Shopping Trips

Geographic Area	N	Auto-Driver	Auto-Pass	Transit	Walk	Bike	Other
Apache Junction	205	67.8%	31.2%	-	1.0%	-	-
Chandler	289	72.0%	27.0%	-	1.0%	-	-
Gilbert	184	49.5%	48.9%	-	1.6%	-	-
Glendale	349	60.2%	32.7%	1.4%	4.6%	.3%	.9%
Mesa	660	66.7%	26.5%	.5%	3.8%	1.1%	1.5%
Peoria	173	65.9%	30.6%	-	1.7%	1.2%	.6%
North Phoenix	767	70.7%	25.8%	-	3.0%	.3%	.3%
West Central Phoenix	484	58.3%	33.1%	1.7%	3.9%	1.7%	1.4%
East Central Phoenix	816	66.9%	21.2%	2.6%	7.6%	.4%	1.3%
South Phoenix	269	65.8%	27.1%	1.9%	4.5%	.4%	.4%
Scottsdale/Fnt Hills/Cv Crk	471	77.7%	18.3%	.2%	2.3%	1.1%	.4%
Sun City/Sun City West	233	77.7%	15.5%	-	1.3%	4.3%	1.3%
Tempe/Guadalupe	324	65.1%	23.8%	1.9%	5.6%	3.7%	-
Southwest	88	76.1%	21.6%	-	2.3%	-	-
Northwest	32	68.8%	31.3%	-	-	-	-
Maricopa County	245	67.3%	29.8%	-	1.6%	.8%	.4%
Total	5589	67.3%	26.5%	.9%	3.7%	.9%	.7%

Base: All home-based shopping trips, weighted.

Table T-15
Major Travel Modes by Home Location for Home-based Other Trips

Geographic Area	N	Auto-Driver	Auto-Pass	Transit	Walk	Bike	Other
Apache Junction	482	52.7%	29.0%	-	11.2%	1.9%	5.2%
Chandler	1463	52.4%	30.9%	.1%	8.8%	1.6%	6.2%
Gilbert	941	42.4%	41.7%	-	10.0%	3.4%	2.6%
Glendale	1886	47.9%	32.3%	.4%	10.9%	.8%	7.6%
Mesa	3939	50.2%	31.9%	.4%	9.5%	1.8%	6.2%
Peoria	814	45.9%	37.7%	.4%	11.7%	1.1%	3.2%
North Phoenix	3206	56.9%	31.4%	.2%	7.1%	.5%	3.8%
West Central Phoenix	2725	42.8%	32.1%	.8%	15.9%	.9%	7.5%
East Central Phoenix	3434	47.9%	26.3%	1.5%	13.7%	1.2%	9.4%
South Phoenix	1640	40.1%	32.7%	.7%	15.2%	1.3%	10.0%
Scottsdale/Fnt Hills/Cv Crk	2349	58.5%	28.4%	.2%	5.4%	1.4%	6.1%
Sun City/Sun City West	901	60.6%	26.4%	-	8.2%	.9%	3.9%
Tempe/Guadalupe	1777	55.6%	26.2%	1.4%	10.7%	3.4%	2.6%
Southwest	476	43.3%	28.2%	1.7%	10.5%	.8%	15.5%
Northwest	149	59.1%	18.1%	-	14.1%	2.0%	6.7%
Maricopa County	1214	51.1%	34.3%	-	7.9%	.9%	5.8%
Total	27396	50.3%	30.8%	.6%	10.6%	1.4%	6.4%

Base: All home-based other trips, weighted.

Table T-16
Major Travel Modes by Home Location for Non-Home-based Trips

Geographic Area	N	Auto-Driver	Auto-Pass	Transit	Walk	Bike	Other
Apache Junction	345	66.7%	21.7%	-	8.7%	-	2.9%
Chandler	905	66.9%	25.5%	.2%	4.4%	.8%	2.2%
Gilbert	435	56.6%	27.6%	3.7%	12.2%	-	-
Glendale	907	67.3%	22.1%	.1%	5.7%	1.0%	3.9%
Mesa	1887	67.0%	23.6%	.7%	6.0%	.1%	2.4%
Peoria	512	64.3%	28.5%	1.0%	3.3%	.2%	2.7%
North Phoenix	2250	69.6%	20.4%	.9%	6.2%	.3%	2.6%
West Central Phoenix	1131	62.7%	24.7%	2.8%	6.1%	.4%	3.4%
East Central Phoenix	1837	70.4%	15.7%	1.7%	9.9%	.9%	1.4%
South Phoenix	757	65.3%	23.2%	1.3%	7.4%	.4%	2.4%
Scottsdale/Fnt Hills/Cv Crk	1358	70.3%	18.9%	1.1%	7.4%	.2%	2.1%
Sun City/Sun City West	456	75.7%	18.2%	.9%	3.1%	.9%	1.3%
Tempe/Guadalupe	1052	71.7%	16.3%	.5%	8.4%	1.5%	1.6%
Southwest	191	76.4%	17.3%	-	3.1%	-	3.1%
Northwest	60	65.0%	16.7%	-	10.0%	-	8.3%
Maricopa County	725	67.4%	26.1%	-	5.0%	.3%	1.2%
Total	14808	68.0%	21.4%	1.1%	6.8%	.5%	2.3%

Base: All non-home-based trips, weighted.

The average reported trip duration was 20 minutes. As shown in Table T-17, 70% of all trips were 20 minutes or shorter. Trips by Transit tended to be the longest, while those by walk and bike were the shortest. Tables T-18 through T-22 show the reported trip durations by mode for the standard trip purposes.

Table T-17
Reported Trip Durations

Trip Duration	N	All Trips	Auto-Driver	Auto-Pass	Transit	Walk	Bike	Other
5 min or less	12588	21.5%	19.9%	23.2%	4.5%	39.4%	21.0%	5.5%
6 to 10 minutes	12101	20.9%	20.5%	23.0%	6.7%	21.6%	21.3%	10.2%
11 to 15 min	11465	19.7%	19.2%	20.9%	10.1%	19.0%	21.0%	20.4%
16 to 20 min	5703	9.8%	9.9%	9.4%	8.1%	7.3%	6.3%	15.0%
21 to 25 min	2856	4.8%	5.3%	4.1%	4.7%	2.4%	2.9%	8.2%
26 to 30 min	7320	12.4%	13.4%	10.5%	12.6%	7.2%	14.4%	20.7%
31 to 35 min	1136	1.9%	2.2%	1.4%	4.9%	.5%	1.9%	3.6%
36 to 40 min	907	1.5%	1.7%	1.0%	5.5%	.5%	1.4%	2.8%
41 to 45 min	1466	2.5%	2.9%	1.7%	8.7%	.7%	.8%	4.5%
46 to 50 min	406	.7%	.7%	.4%	5.3%	.2%	1.4%	1.9%
51 to 55 min	196	.3%	.3%	.2%	2.8%	.0%	.6%	.7%
56 to 60 min	1096	1.9%	2.0%	1.7%	9.3%	.4%	4.3%	1.7%
61 to 65 min	92	.2%	.1%	.1%	2.0%	.1%	.5%	.5%
66 to 70 min	115	.2%	.2%	.2%	1.4%	.0%	.3%	.4%
71 to 75 min	163	.3%	.3%	.2%	3.0%	.1%	.5%	.5%
76 to 80 min	56	.1%	.1%	.1%	.6%	-	.2%	.2%
81 to 85 min	35	.1%	.1%	.0%	.2%	.0%	-	.1%
86 min +	772	1.3%	1.0%	1.7%	9.5%	.6%	1.2%	3.3%
Total	58473	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Average		20.48	21.02	19.15	42.92	13.32	19.56	29.51

Base: All trips, weighted.

Table T-18
Reported Trip Durations by Trip Purpose

Trip Duration	N	All Trips	Home-based Work	Home-based Shop	Home-based Other	Non-Home Based
5 min or less	12588	21.5%	6.3%	28.4%	23.9%	25.6%
6 to 10 minutes	12101	20.9%	9.7%	29.5%	22.5%	21.9%
11 to 15 min	11465	19.7%	17.2%	20.0%	20.9%	18.9%
16 to 20 min	5703	9.8%	11.4%	9.4%	9.2%	9.7%
21 to 25 min	2856	4.8%	6.1%	2.8%	4.6%	5.4%
26 to 30 min	7320	12.4%	27.6%	5.4%	10.6%	7.9%
31 to 35 min	1136	1.9%	3.2%	.6%	1.6%	2.3%
36 to 40 min	907	1.5%	2.8%	.8%	1.2%	1.6%
41 to 45 min	1466	2.5%	5.8%	.9%	1.8%	2.1%
46 to 50 min	406	.7%	1.4%	.4%	.5%	.7%
51 to 55 min	196	.3%	.6%	.2%	.3%	.4%
56 to 60 min	1096	1.9%	5.0%	.7%	1.2%	1.3%
61 to 65 min	92	.2%	.3%	.1%	.1%	.1%
66 to 70 min	115	.2%	.3%	.2%	.2%	.2%
71 to 75 min	163	.3%	.6%	.3%	.2%	.2%
76 to 80 min	56	.1%	.1%	-	.1%	.1%
81 to 85 min	35	.1%	.1%	-	.1%	.1%
86 min +	772	1.3%	1.6%	.5%	1.2%	1.6%
Total	58473	100.0%	6.3%	28.4%	23.9%	25.6%
Average		20.48	32.73	13.74	18.41	18.02

Base: All trips, weighted.

Table T-19
Reported Trip Durations by Trip Purpose for Home-based Work Trips

Trip Duration	N	All Trips	Auto-Driver	Auto-Pass	Transit	Walk	Bike	Other
5 min or less	674	6.3%	5.9%	4.3%	-	36.5%	10.4%	6.3%
6 to 10 minutes	1040	9.7%	9.7%	7.9%	4.9%	20.3%	12.5%	12.5%
11 to 15 min	1835	17.2%	17.3%	17.0%	4.9%	17.8%	22.2%	18.8%
16 to 20 min	1218	11.4%	11.9%	9.3%	4.9%	8.1%	4.2%	9.4%
21 to 25 min	648	6.1%	6.5%	3.9%	1.4%	2.0%	5.6%	-
26 to 30 min	2951	27.6%	27.5%	33.5%	17.6%	10.2%	18.8%	31.3%
31 to 35 min	347	3.2%	3.5%	2.0%	3.5%	1.0%	1.4%	-
36 to 40 min	299	2.8%	2.8%	2.3%	6.3%	1.0%	2.8%	-
41 to 45 min	616	5.8%	5.8%	6.2%	9.9%	.5%	1.4%	3.1%
46 to 50 min	151	1.4%	1.4%	1.4%	3.5%	.5%	1.4%	-
51 to 55 min	61	.6%	.5%	.7%	3.5%	-	2.8%	-
56 to 60 min	531	5.0%	4.6%	7.7%	11.3%	-	7.6%	-
61 to 65 min	32	.3%	.2%	.3%	4.9%	-	2.1%	-
66 to 70 min	33	.3%	.3%	.1%	2.8%	-	.7%	-
71 to 75 min	59	.6%	.5%	.5%	4.2%	-	2.1%	3.1%
76 to 80 min	16	.1%	.1%	.1%	1.4%	-	.7%	-
81 to 85 min	9	.1%	.1%	.1%	.7%	-	-	-
86 min +	173	1.6%	1.2%	2.6%	14.1%	2.0%	3.5%	15.6%
Total	10692	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Average		32.73	32.05	36.85	52.04	22.01	28.72	76.95

Base: All home-based work trips, weighted.

Table T-20
Reported Trip Durations by Trip Purpose for Home-based Shop Trips

Trip Duration	N	All Trips	Auto-Driver	Auto-Pass	Transit	Walk	Bike	Other
5 min or less	1586	28.4%	30.4%	24.7%	3.9%	25.9%	29.1%	15.4%
6 to 10 minutes	1648	29.5%	30.6%	28.9%	9.8%	21.5%	21.8%	17.9%
11 to 15 min	1121	20.1%	19.9%	20.6%	7.8%	18.5%	27.3%	28.2%
16 to 20 min	525	9.4%	8.5%	10.9%	9.8%	13.2%	7.3%	20.5%
21 to 25 min	155	2.8%	2.7%	3.0%	5.9%	1.5%	1.8%	5.1%
26 to 30 min	303	5.4%	4.3%	6.5%	15.7%	16.1%	1.8%	7.7%
31 to 35 min	32	.6%	.6%	.1%	5.9%	.5%	1.8%	2.6%
36 to 40 min	42	.8%	.5%	1.2%	5.9%	1.0%	-	-
41 to 45 min	53	.9%	.9%	1.1%	3.9%	-	1.8%	-
46 to 50 min	25	.4%	.2%	.7%	2.0%	.5%	5.5%	-
51 to 55 min	8	.1%	.1%	.1%	3.9%	-	-	-
56 to 60 min	38	.7%	.5%	.8%	11.8%	.5%	1.8%	2.6%
61 to 65 min	3	.1%	.1%	-	-	-	-	-
66 to 70 min	11	.2%	.1%	.3%	2.0%	-	-	-
71 to 75 min	14	.3%	.1%	.3%	5.9%	.5%	-	-
76 to 80 min	-	-	-	-	-	-	-	-
81 to 85 min	-	-	-	-	-	-	-	-
86 min +	26	.5%	.3%	.6%	5.9%	.5%	-	-
Total	5590	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Average		13.74	12.75	14.94	40.40	16.08	14.53	16.82

Base: All home-based shop trips, weighted.

Table T-21
Reported Trip Durations by Trip Purpose for Home-based Other Trips

Trip Duration	N	All Trips	Auto-Driver	Auto-Pass	Transit	Walk	Bike	Other
5 min or less	6535	23.9%	24.0%	25.0%	3.2%	32.5%	22.8%	4.6%
6 to 10 minutes	6170	22.5%	23.4%	23.9%	3.2%	22.8%	25.5%	9.7%
11 to 15 min	5717	20.9%	20.3%	21.8%	9.6%	22.3%	20.2%	19.9%
16 to 20 min	2519	9.2%	8.8%	8.8%	7.0%	8.2%	6.6%	16.3%
21 to 25 min	1261	4.6%	4.9%	4.2%	4.5%	2.9%	1.9%	7.6%
26 to 30 min	2901	10.6%	10.2%	9.2%	14.0%	8.4%	14.9%	23.0%
31 to 35 min	425	1.6%	1.6%	1.3%	7.6%	.4%	1.9%	4.0%
36 to 40 min	332	1.2%	1.3%	.9%	7.6%	.4%	.8%	3.2%
41 to 45 min	483	1.8%	2.0%	1.1%	6.4%	.8%	.5%	4.4%
46 to 50 min	128	.5%	.4%	.2%	5.7%	.1%	1.1%	2.1%
51 to 55 min	75	.3%	.3%	.2%	3.2%	.1%	-	.6%
56 to 60 min	330	1.2%	1.2%	1.1%	7.6%	.4%	3.7%	1.9%
61 to 65 min	35	.1%	.1%	.1%	1.3%	.0%	-	.6%
66 to 70 min	44	.2%	.1%	.2%	.6%	-	-	.4%
71 to 75 min	66	.2%	.3%	.1%	3.8%	.1%	-	.4%
76 to 80 min	20	.1%	.1%	.0%	.6%	-	-	.2%
81 to 85 min	16	.1%	.1%	.1%		.0%	-	.1%
86 min +	333	1.2%	1.0%	1.5%	14.0%	.5%	.3%	1.3%
Total	27390	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Average		18.41	18.42	17.88	48.81	13.36	17.00	26.88

Base: All home-based other trips, weighted.

Table T-22
Reported Trip Durations by Trip Purpose for Non-Home Based Trips

Trip Duration	N	All Trips	Auto-Driver	Auto-Pass	Transit	Walk	Bike	Other
5 min or less	3793	25.6%	23.1%	24.6%	10.3%	63.0%	28.2%	8.7%
6 to 10 minutes	3241	21.9%	22.4%	23.1%	10.3%	18.5%	18.3%	11.9%
11 to 15 min	2791	18.9%	19.3%	20.2%	16.0%	9.9%	16.9%	22.7%
16 to 20 min	1439	9.7%	10.2%	10.3%	11.5%	3.5%	7.0%	8.1%
21 to 25 min	792	5.4%	5.8%	4.3%	7.7%	1.2%	5.6%	12.5%
26 to 30 min	1164	7.9%	8.6%	7.5%	6.4%	1.0%	11.3%	9.3%
31 to 35 min	332	2.2%	2.5%	2.0%	3.2%	.6%	2.8%	2.4%
36 to 40 min	233	1.6%	1.9%	1.0%	2.6%	.4%	2.8%	1.2%
41 to 45 min	314	2.1%	2.2%	1.7%	11.5%	.6%	1.4%	5.4%
46 to 50 min	100	.7%	.7%	.5%	7.7%	.2%	-	.9%
51 to 55 min	52	.4%	.4%	.2%	1.3%	-	-	1.2%
56 to 60 min	195	1.3%	1.2%	1.6%	8.3%	.3%	1.4%	.9%
61 to 65 min	21	.1%	.1%	.1%	.6%	.2%	-	-
66 to 70 min	28	.2%	.2%	.1%	.6%	-	1.4%	.9%
71 to 75 min	24	.2%	.1%	.2%	-	-	-	.9%
76 to 80 min	21	.1%	.1%	.3%	.6%	-	-	.3%
81 to 85 min	10	.1%	.1%	.0%	-	-	-	.3%
86 min +	239	1.6%	1.2%	2.2%	1.3%	.6%	2.8%	12.5%
Total	14789	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%	100.0%
Average		18.02	17.75	18.20	29.34	10.92	18.70	40.13

Base: All non-home-based trips, weighted.

All respondents who reported making a trip (regardless of mode used) were asked how many traveled in their party. Most weekday shared trips were for school or eating. On the weekend, almost all trips were shared trips. The following tables show the distribution of auto occupancy for all auto-driver trips as well as average auto occupancy by day of week and trip purpose.

Table T-23
Auto Occupancy by Trip Purpose

Occupancy	Home-based Work	Home-based Shopping	Home-based Other	Non-Home Based	Total
1	93.0%	70.4%	66.8%	69.4%	72.5%
2	5.2%	22.4%	22.7%	21.3%	19.2%
3	1.1%	4.5%	6.7%	6.2%	5.4%
4	0.6%	2.7%	3.8%	3.1%	2.9%
Total	100.0%	100.0%	100.0%	100.0%	100.0%

Base: All auto-driver trips, weighted (n=27,610).

Table T-24
Average Auto Occupancy by Day of Week and Trip Purpose

Trip Purpose	Weekday	Saturday	Sunday
Work	1.08	1.12	1.13
School	1.26	1.12	1.00
Family/personal	1.68	1.85	1.65
Eat	1.63	2.09	2.08
Shopping	1.43	1.68	1.72
Other	1.36	1.73	1.88

Base: All auto-driver trips, weighted (n=27,610).

In terms of auto trips, most respondents (92%) reported using a household vehicle to make the trip. Auto trips in non-household vehicles, were most often made by households in East Central Phoenix, Chandler, and Sun City/Sun City West.

Table T-25
Household Vehicle Used

Geographic Area	N	Yes	No
Apache Junction	1013	92.0%	8.0%
Chandler	2960	90.9%	9.1%
Gilbert	1636	95.7%	4.3%
Glendale	3380	92.1%	7.9%
Mesa	6990	91.3%	8.7%
Peoria	1604	95.1%	4.9%
North Phoenix	6988	94.2%	5.8%
West Central Phoenix	4640	91.2%	8.8%
East Central Phoenix	6210	90.8%	9.2%
South Phoenix	2742	91.3%	8.7%
Scottsdale/Fnt Hills/CvCrk	4364	93.4%	6.6%
Sun City/Sun City West	1575	90.7%	9.3%
Tempe/Guadalupe	3430	93.1%	6.9%
Southwest	800	93.4%	6.6%
Northwest	251	92.8%	7.2%
Maricopa County	2301	90.9%	8.1%
Total	50884	92.2%	7.8%

Base: All auto trips, weighted.

All respondents that made an auto trip and who were interviewed in person were asked whether any portion of that trip was made on a freeway. Of the 23,899 auto trips that fell into this category, 20% were made on some portion of a freeway. The majority of freeway trips were made during the week (Monday through Friday), and the most frequent users live in Peoria and North Phoenix.

Table T-26
Freeway Used

		Weekday Trips		Saturday Trips		Sunday Trips	
Geographic Area	**N**	**Yes**	**No**	**Yes**	**No**	**Yes**	**No**
Apache Junction	586	12.0%	88.0%	-	100.0%	-	-
Chandler	1273	22.1%	77.9%	23.5%	76.5%	22.2%	77.8%
Gilbert	637	11.0%	89.0%	10.9%	89.1%	-	100.0%
Glendale	1501	17.5%	82.5%	10.8%	89.2%	3.8%	96.2%
Mesa	3135	20.5%	79.5%	18.5%	81.5%	16.1%	83.9%
Peoria	776	26.2%	73.8%	37.0%	63.0%	-	100.0%
North Phoenix	3405	26.4%	73.6%	6.2%	93.8%	37.6%	62.4%
West Central Phoenix	2142	17.8%	82.2%	19.6%	80.4%	13.1%	86.9%
East Central Phoenix	3210	16.2%	83.8%	21.7%	78.3%	16.3%	83.7%
South Phoenix	1008	17.1%	82.9%	15.8%	84.2%	7.7%	92.3%
Scottsdale/Fnt Hills/CvCrk	2100	16.1%	83.9%	11.0%	89.0%	14.6%	85.4%
Sun City/Sun City West	872	11.5%	88.5%	15.3%	84.7%	41.5%	58.5%
Tempe/Guadalupe	1802	20.9%	79.1%	10.0%	90.0%	26.2%	73.8%
Southwest	410	20.5%	79.5%	2.5%	97.5%	14.8%	85.2%
Northwest	146	18.7%	81.3%	-	100.0%	-	100.0%
Maricopa County	896	22.1%	77.9%	16.7%	83.3%	29.9%	70.1%
Total	23892	19.3%	80.7%	16.8%	83.2%	20.0%	80.0%

Base: All auto trips reported in person, weighted.

All respondents who reported using transit were asked for access and egress modes. As shown in Table T-22, most transit trips began with walking (89%).

Table T-27
Access Mode of Transit Riders

Access Mode	N	Percent
Walked	447	88.7%
Dropped off	25	5.0%
Drove/parked	9	1.8%
Bike	5	1.1%
Other	17	3.4%
Total	504	100.0%

Base: All transit trips, weighted.

As with the access mode, the majority of transit riders walked from the transit stop to their ultimate destination (76%).

Table T-28
Egress Mode of Transit Riders

Access Mode	N	Percent
Walked	381	75.6%
Drove parked car	19	3.8%
Picked up	2	0.3%
Bike	5	1.0%
Transferred to new bus	84	16.7%
Other	13	2.6%
Total	504	100.0%

Base: All transit trips, weighted.

4.5. Survey Data Expanded

The expansion factors created in the previous section were applied to the survey data. The results, shown in the following tables, reflect the total number of weekday, Saturday and Sunday trips captured through the survey and expanded using the factors developed and documented in Section 3.2 of this report.

The 4,018 Maricopa County households reported 58,331 trips. When expanded, these 58,331 trips become 13,942,000 regional trips. This includes 2,207,000 work trips, 946,000 school trips, and 2,140,000 family/personal trips. The following tables show expanded trips by weekday vs. travel on Saturday and travel on Sunday. The proportion of weekday vs. Saturday vs. Sunday trips is based on the distribution of travel days assigned to households for recording travel, as shown in Table 2-9.

Table X-1
Expanded Trips by Trip Purpose in Thousands – Weekday Travel

Geographic Area	Work	School	Family/ Personal	Eat	Shopping	Other	Total
Apache Junction	26	9	39	22	47	124	267
Chandler	120	50	113	28	49	299	658
Gilbert	53	24	63	15	30	176	361
Glendale	139	75	132	26	68	376	815
Mesa	270	132	257	59	117	779	1614
Peoria	64	27	72	17	39	165	383
North Phoenix	340	127	291	81	153	790	1782
West Central Phoenix	194	108	190	35	83	575	1185
East Central Phoenix	296	114	244	71	138	801	1664
South Phoenix	105	63	90	22	49	309	638
Scottsdale/Fountain Hills	167	51	159	53	97	525	1053
Sun City/Sun City West	43	13	56	20	47	201	380
Tempe/Guadalupe	155	55	124	36	64	389	822
Southwest	37	23	30	9	14	103	216
Northwest	9	5	11	2	10	44	82
Maricopa County	121	51	112	39	74	328	724
Total	2138	925	1982	537	1079	5983	12644

Base: All weekday trips, expanded.

Table X-2
Expanded Trips by Trip Purpose in Thousands - Saturday Travel

	Work	School	Family/ Personal	Eat	Shopping	Other	Total
Total	39	13	80	46	112	338	628

Base: All Saturday trips, expanded.

Table X-3
Expanded Trips by Trip Purpose in Thousands - Sunday Travel

	Work	School	Family/ Personal	Eat	Shopping	Other	Total
Total	30	8	78	44	97	414	670

Base: All Sunday trips, expanded.

The 13,942,000 trips represent 8,619,000 auto driver trips, 3,489,000 auto passenger trips, and 140,000 transit trips. In addition, there are 1,083,000 walk trips. The following tables show these trips broken out by weekday vs. Saturday travel vs. Sunday travel

Table X-4
Expanded Trips by Mode in Thousands – Weekday Travel

Trip Purpose	Auto Driver	Auto Pass	Transit	Walk	Bike	Other	Total
Home-based Work	2033	269	41	50	40	9	2444
Home-based Shopping	747	276	13	50	13	10	1110
Home-based Other	2927	1725	40	687	80	430	5888
Non-home Based	2204	638	38	225	18	80	3202
Total	7911	2909	132	1012	151	529	12644

Base: All weekday trips, expanded.

Table X-5
Expanded Trips by Mode in Thousands – Saturday Travel

Trip Purpose	Auto Driver	Auto-Pass	Transit	Walk	Bike	Other	Total
Home-based Work	43	8	1	2	-	-	54
Home-based Shopping	72	41	1	2	-	2	118
Home-based Other	142	109	2	16	4	6	280
Non-home Based	94	64	1	14	1	1	176
Total	351	223	5	34	6	9	628

Base: All Saturday trips, expanded.

Table X-6
Expanded Trips by Mode in Thousands – Sunday Travel

Trip Purpose	Auto Driver	Auto-Pass	Transit	Walk	Bike	Other	Total
Home-based Work	32	6	-	1	1	-	40
Home-based Shopping	65	33	-	5	1	-	105
Home-based Other	181	164	2	25	5	7	385
Non-home Based	79	55	-	6	-	1	141
Total	357	258	3	37	7	9	670

Base: All Sunday trips, expanded.

5. EVALUATION OF SURVEY RESULTS

As previously stated, the Maricopa Regional Household Travel Survey was conducted to help understand the travel behavior of the Phoenix region and to provide input information for future travel demand model development. A review of the resultant database through preparation of this report suggests that:

a. The percentage of geocoded trip ends was very high;

b. The collected data includes the variables and geographic breadth to allow analysts to compare and combine it with 2000 Census data as that becomes available,

c. The analysis of survey data and the comparison results with national estimates of trip-making behavior indicate that the survey results appear to be very reasonable. These analyses are described below, along with the associated tables.

Tables 5-1, 5-2, and 5-3 show trip rates derived from weighted survey data. The relative magnitudes of the rates appear to be quite reasonable and consistent with other high quality data sets.

Table 5-1
Household Survey Daily Trip Rates by Trip Purpose (All Modes) – Weekday Travel

Household Classification	Households in Survey	Home-Based Work Trip Rate	Home-Based Shopping Trip Rate	Home-Based Other Trip Rate	Non-home Based Trip Rate	Total
Total	**4018**	**1.41**	**0.65**	**3.43**	**1.89**	**7.38**
1-person	1102	0.64	0.38	1.12	1.05	3.19
2-person	1426	1.32	0.71	2.41	1.87	6.31
3-person	536	1.90	0.76	4.10	2.62	9.38
4+-person	954	2.18	0.81	7.25	2.48	12.72
0-vehicle	257	0.69	0.36	1.68	0.50	3.23
1-vehicle	1619	0.94	0.54	2.51	1.40	5.39
2-vehicles	1606	1.68	0.74	4.18	2.32	8.92
3+ vehicles	536	2.40	0.84	4.81	2.75	10.80
0-worker	991	0.00	0.78	2.31	1.12	4.21
1-worker	1533	1.21	0.58	3.26	1.73	6.15
2+-workers	1493	2.55	0.63	4.35	2.57	8.18

Base: All weekday household travel, weighted.

Table 5-2
Household Survey Daily Trip Rates by Trip Purpose (All Modes) – Saturday Travel

Household Classification	Saturday Households in Survey	Home-Based Work Trip Rate	Home-Based Shopping Trip Rate	Home-Based Other Trip Rate	Non-home Based Trip Rate	Total
Total	**407**	**0.56**	**1.20**	**2.88**	**1.81**	**6.44**
1-person	118	0.27	0.50	1.14	0.85	2.76
2-person	129	0.41	1.32	2.36	2.12	6.21
3-person	58	0.53	2.05	3.77	2.82	9.14
4+-person	102	1.12	1.38	5.04	1.94	9.46
0-vehicle	24	0.42	0.67	0.75	0.38	2.21
1-vehicle	186	0.37	0.99	1.93	1.40	4.69
2-vehicles	169	0.61	1.43	4.09	2.48	8.60
3+ vehicles	28	1.65	1.67	3.62	1.71	8.66
0-worker	93	0.00	0.78	1.52	0.73	3.05
1-worker	166	0.46	1.00	2.94	1.76	6.14
2+-workers	148	1.02	1.70	3.66	2.54	8.92

Base: All Saturday household travel, weighted.

Table 5-3
Household Survey Daily Trip Rates by Trip Purpose (All Modes) – Sunday Travel

Household Classification	Sunday Households in Survey	Home-Based Work Trip Rate	Home-Based Shopping Trip Rate	Home-Based Other Trip Rate	Non-home Based Trip Rate	Total
Total	**426**	**0.40**	**1.07**	**3.86**	**1.38**	**6.71**
1-person	113	0.20	0.41	1.49	0.73	2.84
2-person	143	0.30	0.94	3.08	1.23	5.56
3-person	73	0.33	1.67	4.27	1.64	7.91
4+-person	97	0.81	1.58	7.47	2.18	12.05
0-vehicle	20	0.13	0.89	2.04	0.47	3.52
1-vehicle	155	0.35	0.70	2.72	0.93	4.70
2-vehicles	170	0.38	1.19	4.53	1.82	7.92
3+ vehicles	80	0.58	1.59	5.10	1.57	8.84
0-worker	95	0.00	0.46	2.70	0.86	4.04
1-worker	162	0.35	1.01	3.48	1.37	6.21
2+-workers	168	0.65	1.48	4.88	1.69	8.70

Base: All Sunday household travel, weighted.

Table 5-4 compares the household survey results to rates provided in NCHRP Report #365, a source of national "rules-of-thumb" for modeling analyses. Caution should be exercised in comparing the 1989 trip rates to those from the 2001 survey, as the surveys employed different methodologies. The HBW and total trip rates are slightly lower than the "norm" and will undergo a detailed review as the modeling update gets underway.

Table 5-4
Comparison of Household Survey Trip Rates to NCHRP 365

	Home-Based Work Trip Rate	Home-Based Other Trip Rate	Non-home Based Trip Rate	Total Trip Rate
Maricopa - 2001				
Daily Rate	**1.41**	**4.08**	**1.89**	**7.38**
Percent of Trips	19%	55%	26%	100%
Maricopa - 1989				
Daily Rate	**1.85**	**3.96**	**2.33**	**8.14**
Percent of Trips	23%	49%	28%	100%
NCHRP 365				
Daily Rate	1.80	4.80	2.00	8.50
Percent of Trips	21%	56%	23%	100%

Base: All households, weighted.

As Table 5-5 shows, the Maricopa trip rates are slightly lower than the NCHRP rates, with the biggest difference occurring for smaller households and zero vehicle households.

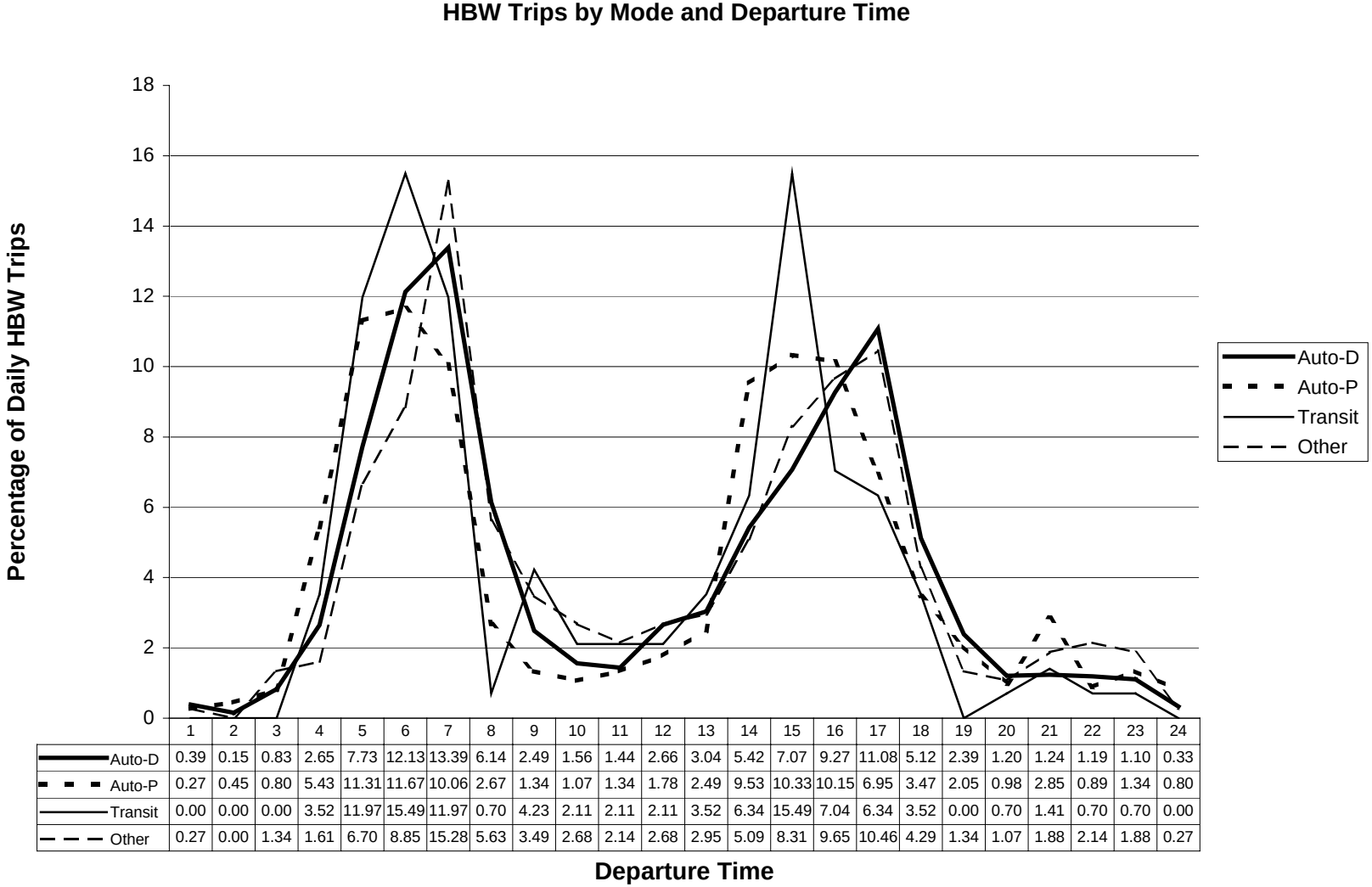
Table 5-5
Comparison of Household Survey Trip Rates to NCHRP Trip Rates

Classification	**Households in Survey**	**Survey Total Trip Rate**	**NCHRP Total Trip Rate**
One person households	1102	3.19	4.2
Two person households	1426	6.31	7.3
Three person households	536	9.38	9.3
Four person households	954	12.72	12.0
Zero vehicle households	257	3.23	4.1
One vehicle households	1619	5.39	6.3
Two vehicle households	1606	7.92	9.7
Three + vehicle households	536	8.80	11.8
Total	**4018**	**7.38**	**8.5**

Base: All households, weighted.

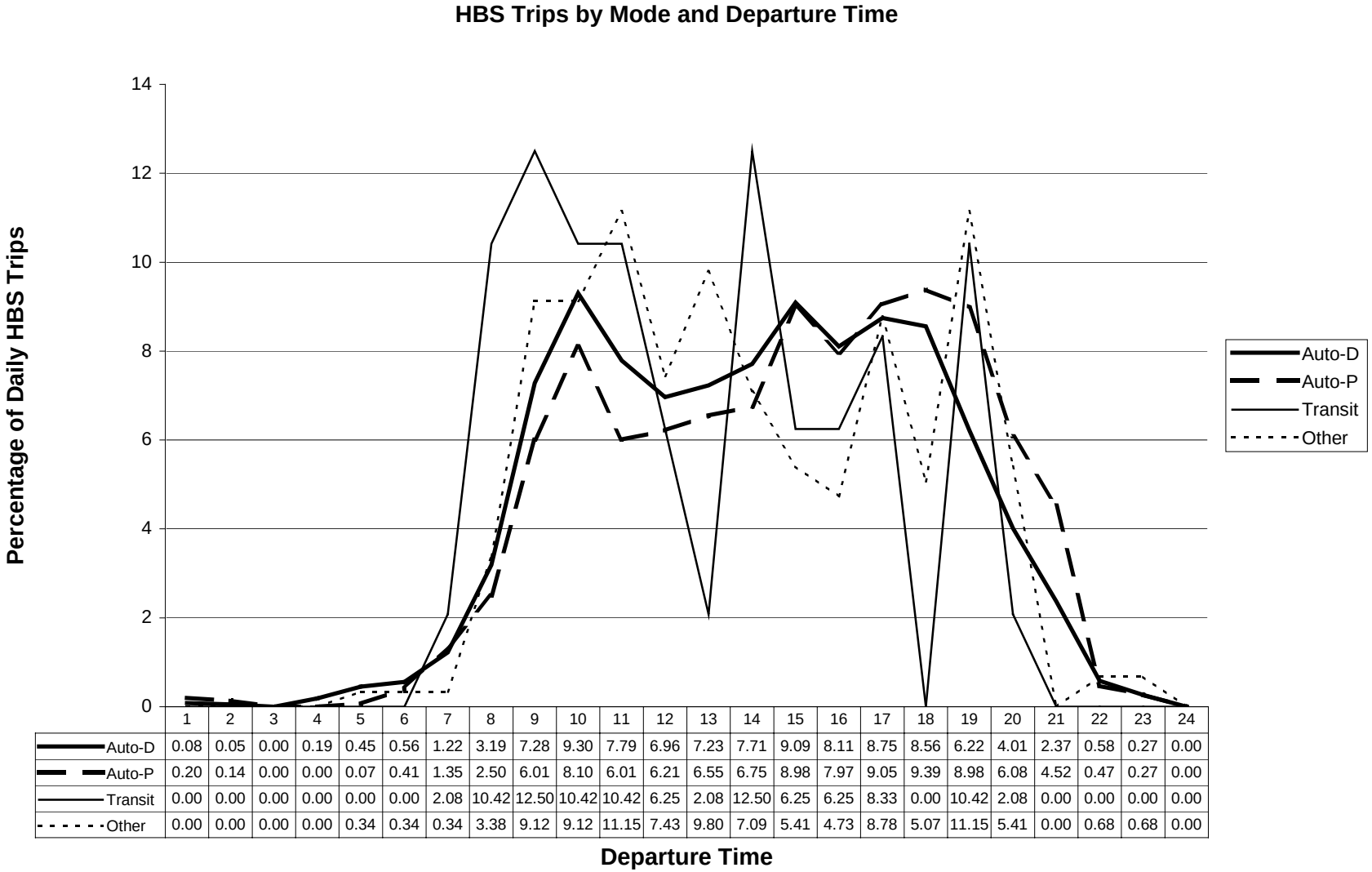
The tables and figures on the following pages show travel by time of day and mode based on trip purpose (home-based work, home-based shopping, home-based other, and non-home based trips). The times reflected in the tables and figures are departure times for each trip.

Figure 5-1
Home-Based Work Trips by Mode and Departure Time



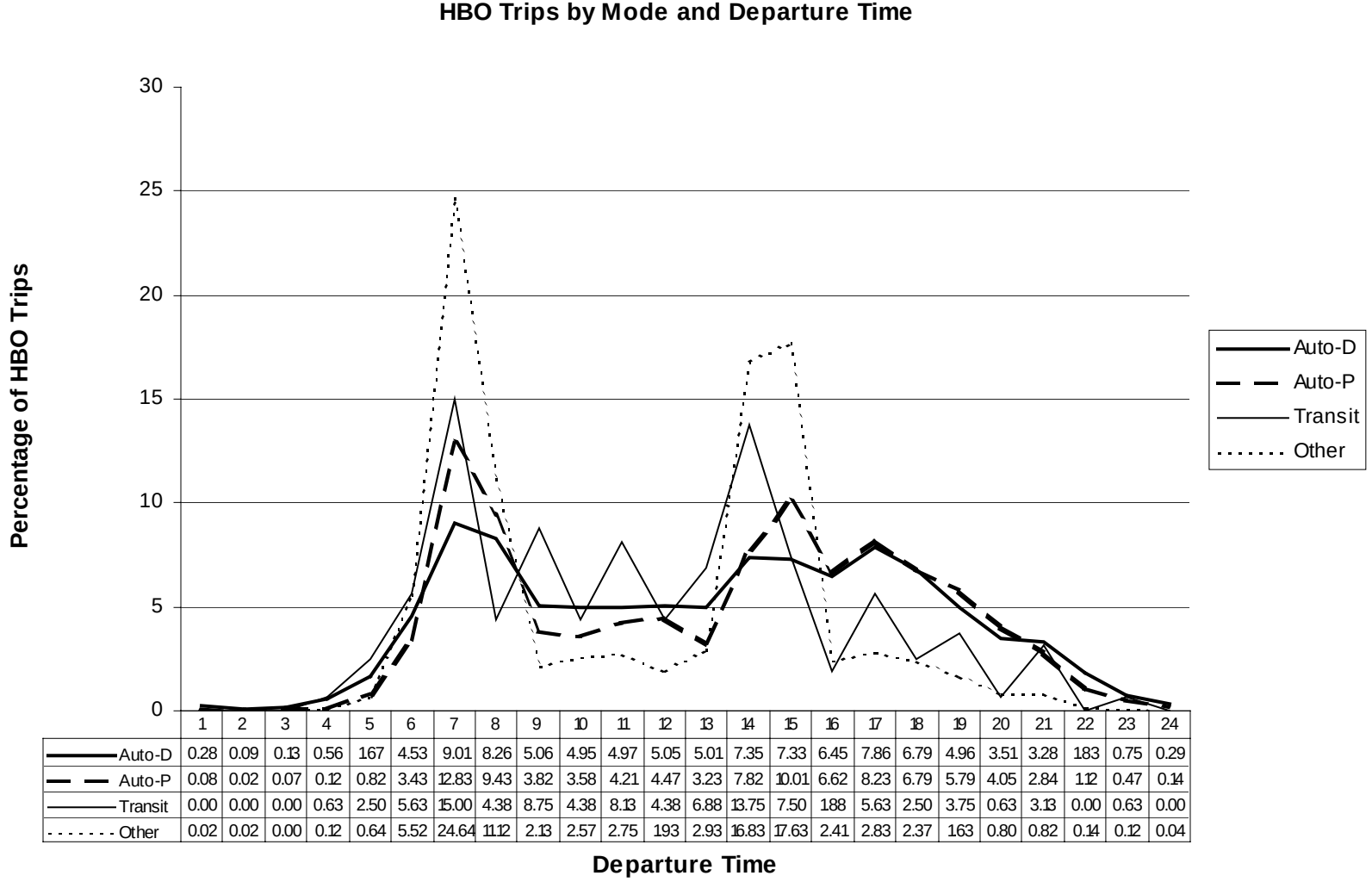
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Auto-D	0.39	0.15	0.83	2.65	7.73	12.13	13.39	6.14	2.49	1.56	1.44	2.66	3.04	5.42	7.07	9.27	11.08	5.12	2.39	1.20	1.24	1.19	1.10	0.33
Auto-P	0.27	0.45	0.80	5.43	11.31	11.67	10.06	2.67	1.34	1.07	1.34	1.78	2.49	9.53	10.33	10.15	6.95	3.47	2.05	0.98	2.85	0.89	1.34	0.80
Transit	0.00	0.00	0.00	3.52	11.97	15.49	11.97	0.70	4.23	2.11	2.11	2.11	3.52	6.34	15.49	7.04	6.34	3.52	0.00	0.70	1.41	0.70	0.70	0.00
Other	0.27	0.00	1.34	1.61	6.70	8.85	15.28	5.63	3.49	2.68	2.14	2.68	2.95	5.09	8.31	9.65	10.46	4.29	1.34	1.07	1.88	2.14	1.88	0.27

Figure 5-2
Home-Based Shopping Trips by Mode and Departure Time



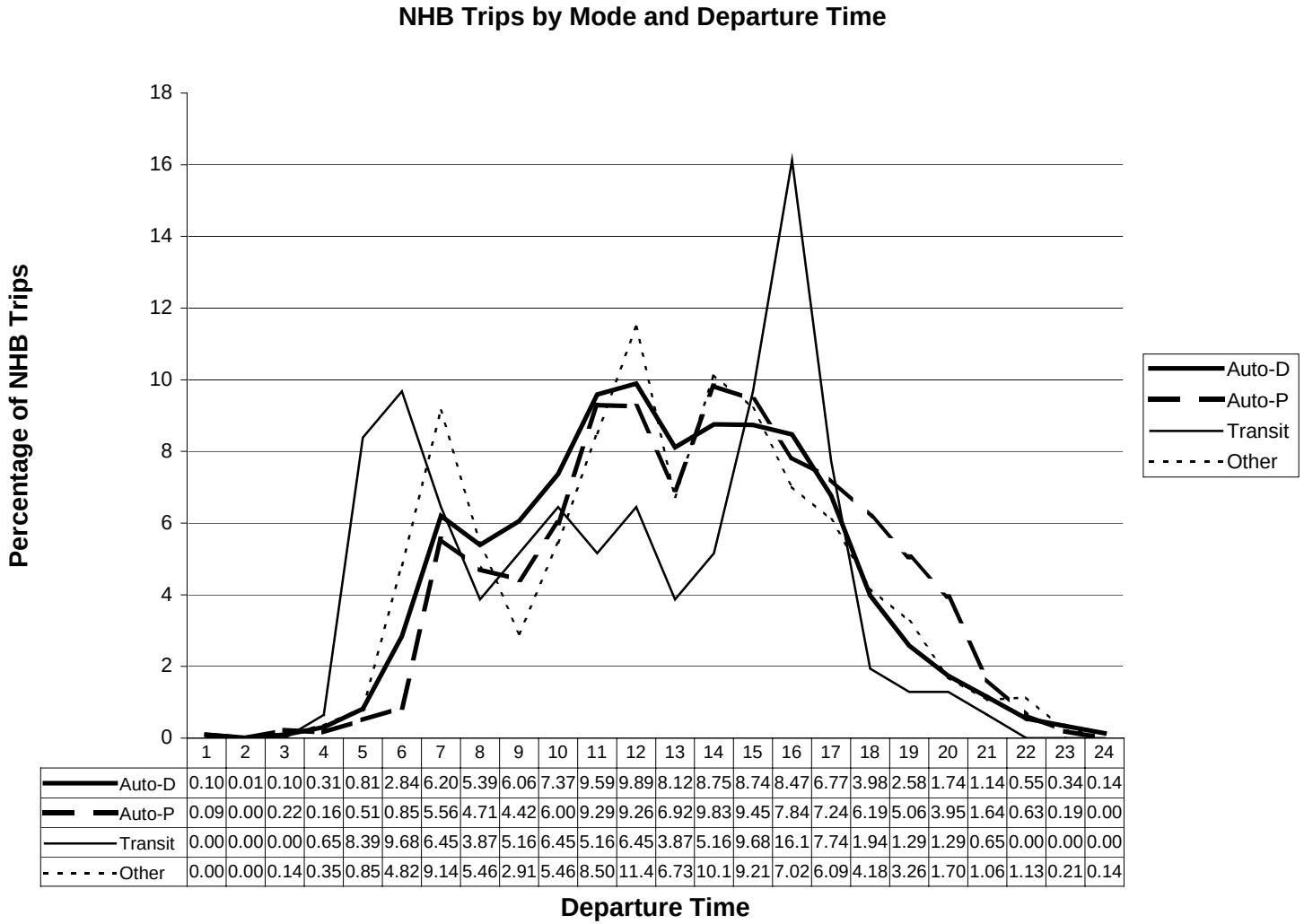
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Auto-D	0.08	0.05	0.00	0.19	0.45	0.56	1.22	3.19	7.28	9.30	7.79	6.96	7.23	7.71	9.09	8.11	8.75	8.56	6.22	4.01	2.37	0.58	0.27	0.00
Auto-P	0.20	0.14	0.00	0.00	0.07	0.41	1.35	2.50	6.01	8.10	6.01	6.21	6.55	6.75	8.98	7.97	9.05	9.39	8.98	6.08	4.52	0.47	0.27	0.00
Transit	0.00	0.00	0.00	0.00	0.00	0.00	2.08	10.42	12.50	10.42	10.42	6.25	2.08	12.50	6.25	6.25	8.33	0.00	10.42	2.08	0.00	0.00	0.00	0.00
Other	0.00	0.00	0.00	0.00	0.34	0.34	0.34	3.38	9.12	9.12	11.15	7.43	9.80	7.09	5.41	4.73	8.78	5.07	11.15	5.41	0.00	0.68	0.68	0.00

Figure 5-3
Home-Based Other Trips by Mode and Departure Time



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Auto-D	0.28	0.09	0.13	0.56	1.67	4.53	9.01	8.26	5.06	4.95	4.97	5.05	5.01	7.35	7.33	6.45	7.86	6.79	4.96	3.51	3.28	1.83	0.75	0.29
Auto-P	0.08	0.02	0.07	0.12	0.82	3.43	12.83	9.43	3.82	3.58	4.21	4.47	3.23	7.82	10.01	6.62	8.23	6.79	5.79	4.05	2.84	1.12	0.47	0.14
Transit	0.00	0.00	0.00	0.63	2.50	5.63	15.00	4.38	8.75	4.38	8.13	4.38	6.88	13.75	7.50	1.88	5.63	2.50	3.75	0.63	3.13	0.00	0.63	0.00
Other	0.02	0.02	0.00	0.12	0.64	5.52	24.64	11.12	2.13	2.57	2.75	1.93	2.93	16.83	17.63	2.41	2.83	2.37	1.63	0.80	0.82	0.14	0.12	0.04

Figure 5-4
Non-Home-Based Trips by Mode and Departure Time



	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24
Auto-D	0.10	0.01	0.10	0.31	0.81	2.84	6.20	5.39	6.06	7.37	9.59	9.89	8.12	8.75	8.74	8.47	6.77	3.98	2.58	1.74	1.14	0.55	0.34	0.14
Auto-P	0.09	0.00	0.22	0.16	0.51	0.85	5.56	4.71	4.42	6.00	9.29	9.26	6.92	9.83	9.45	7.84	7.24	6.19	5.06	3.95	1.64	0.63	0.19	0.00
Transit	0.00	0.00	0.00	0.65	8.39	9.68	6.45	3.87	5.16	6.45	5.16	6.45	3.87	5.16	9.68	16.1	7.74	1.94	1.29	1.29	0.65	0.00	0.00	0.00
Other	0.00	0.00	0.14	0.35	0.85	4.82	9.14	5.46	2.91	5.46	8.50	11.4	6.73	10.1	9.21	7.02	6.09	4.18	3.26	1.70	1.06	1.13	0.21	0.14

CONCLUSION

The data set produced as a result of the Maricopa Regional Household Travel Survey represents an excellent source of regional travel behavior information for the transportation planning community. The project scope of work, along with careful survey design and execution, have provided a high quality data set for use in regional transportation planning and future modeling and travel forecasting efforts. As indicated by the tables and summaries presented throughout this report, the Maricopa Regional Household Travel Survey data set will serve as a solid foundation for regional model update efforts.

APPENDIX A: RECRUITMENT QUESTIONNAIRE

Maricopa Regional Household Activity Survey
Recruitment Questionnaire
(Demographic Information)

NOTE: Text in CAPS is not read by interviewer; text in upper and lower case is read by interviewer.

Introduction
Hi, I'm _____ and I'm calling on behalf of the Maricopa Area of Governments, or MAG. MAG works closely with<CITY> to plan for transportation in your area. May I speak with <FNAME><LNAME>

IF NAME UNKNOWN:
May I speak with a head of the household or someone 18 years of age or older?

The Maricopa Association of Governments is conducting a study to understand why and how people travel in Maricopa County, as part of planning for future transportation needs. The study is purely a research effort and any information you provide will be held in strict confidence. The information you provide will be combined with that of 4,000 other households from throughout the county to make decisions about how to improve the transportation system.

To be certain that everyone in the county is properly represented, I'll be asking some questions about your household. This includes information about your vehicles, where family members work or travel for school, and household income. These are all important for understanding how and where people travel, and how it varies by day of week or time of day.

The survey has three parts. Part one is a telephone interview that I'd like to start now. In part two, people in your household will record their travel for two days in a log. For part three, we'll call back to collect the log information from each person. If you have no questions, I'll start Part One now.

H1. First, how many vehicles are presently available to members of your household? This includes all cars, vans, trucks, SUVs, RVs, motorcycles and mopeds in working order, whether owned or leased or provided by an employer.

Vehicle Information – questions repeated for each vehicle in the household
Now I need to get some information about each vehicle in your household. Starting with<VEHNO >, what is the vehicle year, make and model?

V1. ENTER VEHICLE YEAR
V2. What is the make of that vehicle?

ACURA	01	LINCOLN	22
AUDI	02	MAZDA	23
BMW	03	MERCURY	24
BUICK	04	MERCEDES	25
CADILLAC	05	MITSUBISHI	26
CHEVROLET	06	NISSAN	27
CHRYSLER	07	OLDSMOBILE	28
DAEWOO	41	PLYMOUTH	29
DODGE	08	PONTIAC	30
FORD	09	PORSCHE	31
GEO	10	RANGE ROVER	32
GMC	11	SAAB	33
HARLEY DAVIDSON	12	SATURN	34
HONDA	13	SUBARU	35
HYUNDAI	14	SUZUKI	36
INFINITI	15	TOYOTA	37
ISUZU	16	VOLKSWAGEN	38
JAGUAR	17	VOLVO	39
JEEP	18	YAMAHA	40
KAWASAKI	19	OTHER, SPECIFY	97
KIA	20	DON'T KNOW	98
LEXUS	21	REFUSED	99

V3. What is the model? PRESS ENTER TO RECORD RESPONSE

V4. What is the body type of the vehicle?
Auto..... 01
Van..... 02
RV..... 03
Sport Utility Vehicle..... 04
Pick-up Truck..... 05
Other Truck..... 06
Motorcycle/Moped..... 07
OTHER, SPECIFY..... 97
DK/RF..... 99

V5. Is this vehicle owned or leased by your household or is it employer-provided?
OWNED/LEASED BY HOUSEHOLD MEMBER
EMPLOYER PROVIDED..... 2
RENTAL CAR..... 3
BORROWED FROM FRIEND/RELATIVE…4
OTHER, SPECIFY..... 7
DK/RF..... 9

Household Information

H2 Now, how many bicycles in working condition are available to members of your household for use in their daily travel?

H3. How many people, including yourself, live in your household? CLARIFY: This includes all persons who sleep there at least 3 nights per week.

H4. Of these, how many are employed, either full-time or part-time?

H5. Do you live in a...
Unattached Single Family Home..... 1
Duplex..... 2
Apartment..... 3
Condominium or townhouse..... 4
Mobile home or trailer..... 5
Group quarters (dorms, barracks, etc. (eligible respondents based on the "room" to which phone assigned.) 6
OTHER, SPECIFY..... 7
DK/RF..... 9

H6. Do you own or rent this home?
Own/buying..... 1
Rent..... 2
OTHER, SPECIFY..... 7
DK..... 8
RF..... 9

H7. How long have you lived at this address?
LESS THAN A YEAR..... 1
1 TO 3 YEARS..... 2
4 TO 5 YEARS..... 3
MORE THAN 5 YEARS..... 4
DK/RF..... 9

H8. And do you have a home computer?
YES..... 1
NO..... 2
DK..... 8
RF..... 9

H9. [IF HAVE HOME COMPUTER] Do you have access to the Internet from home?
YES 1
NO 2
DK 8
RF 9

H10. [IF HAVE INTERNET ACCESS] What type of Internet access do you have at home?
NONE 0
Dial up/Modem with tones 1
High speed connection 2
Web TV 3
OTHER, SPECIFY 7
DK/RF 9

Person Information

Now I need to get some information about each person in your household, so I can prepare individual diaries. Again, I want to assure you that this information is for research purposes only and will be kept strictly confidential. Earlier, you indicated that there were<HHSIZ>persons in your household. Okay. Now I'll begin with you...
What is your first name?
What is the first name of the other person living in your home?
What is the first name of the next person in your home, from oldest to youngest?

P1. What is<FNAME >'s relationship to you? DON'T ASK FOR RESPONDENT
SELF 1
Spouse/partner 2
Son/Daughter 3
Mother/Father/Mother In-law/Father In-law 4
Other relative 5
Live-in Help 6
Not Related 7
DK/RF 9

P2. What is<FNAME >'s gender? DON'T ASK FOR RESPONDENT
MALE 1
FEMALE 2
DK/RF 9

P3. How old is <FNAME>?

P4. [IF AGE>15] Do<YOU>have a valid driver's license?
Yes 1
No 2
DK 8
RF 9

P5. Do/Does<YOU >have any type of physical disability?
Yes 1
No 2
DK/RF 9

P6. [IF HAS A DISABILITY] What type of disability is that?
NONE 0
Difficulty standing, walking or climbing stairs 1
Visually impaired/blind 2
Hearing impaired/deaf 3
Wheelchair 4
Require cane/walker 5
OTHER, SPECIFY 7
DK/RF 9

P7. [IF HAS A DISABILITY] Do/Does<YOU>have a disabled license plate or parking permit?
YES.....1
NO.....2
DK/RF 9

P8. How would<YOU >describe<YOUR >race or ethnic background?
WHITE/NOT HISPANIC 1
HISPANIC 2
AFRICAN AMERICAN 3
ASIAN/PACIFIC ISLANDER 4
AMERICAN INDIAN/NATIVE AMERICAN 5
OTHER, SPECIFY 7
DK/RF 9

P9. [AGE>15] Which of the following best describes<YOUR>current situation?
Employed full or part time 1
Self-employed 2
Regular volunteer worker. 3
Unemployed.....4
Retired 5
Full-time Homemaker.....6
OTHER 7
DK/RF 9

Work-Related Questions
P10. [IF EMPLOYED] On average, how many hours a week do<YOU>work at<YOUR>job?

P11. How would you describe<YOUR>work schedule at<YOUR>job? MULTIPLE RESPONSE
HOURS FIXED AND THE SAME EVERY DAY 1
HOURS VARY AT MY CHOICE..... 2
HOURS ALLOWED TO VARY WITHIN FIXED LIMITS 3
FIXED STARTING TIME, BUT VARIABLE ENDING TIME..... 4
FIXED HOURS, BUT DIFFERENT HOURS ON DIFFERENT DAYS 5
VARIABLE DEPENDING ON WORK..... 6
OTHER, SPECIFY 7
DK/RF 9

P12. What time do/does<YOU>typically start work? MILITARY TIME, IF VARIES - OBTAIN FOR LAST WEEK

P13. What time do/does<YOU>typically end work? MILITARY TIME, IF VARIES - OBTAIN FOR LAST WEEK

P14. What is the name of<YOUR>employer?

P15. What do/does<YOU>do there?
Executive, Admin, or Managerial.....01
Professional specialty 02
Technicians or related support.....03
Sales.....04
Administrative support, clerical.....05
Private Household.....06
Protective Services 07
Service, except protective and household.....08
Farming, Forestry, or Fishing 09
Precision, Production, Craft, or Repair.....10
Machine operator, assembler, or inspector 11
Transportation, or material moving.....12
Handler, equipment cleaner, helper, or laborer.....13
OTHER, SPECIFY 97
DK.....98
RF 99

P16. Which of the following best describes<YOUR>job location?
Home 1
Fixed Address 2
No fixed address (e.g. traveling salesman, repairman, etc.) 3
DK/RF 9

P17. Would<YOU >say that your job location is:
Office building 01
Retail 02
Industrial site 03
Medical 04
Educational (12th grade or less) 05
Educational (higher than 12th grade) 06
Government 07
Residential 08
Open/Public Places (bus stop, park, ball park, church, other recreational sites) 09
OTHER, SPECIFY 97
DK 98
RF 99

P18. What is the street address?

P19. What is the name of a street that crosses near

P20. Is there a landmark or store that can be found on a map near

P21. How long have<YOU >worked at this location?
LESS THAN A YEAR 1
1 TO 3 YEARS 2
4 TO 5 YEARS 3
MORE THAN 5 YEARS 4
DK/RF 9

P22. How do/does<YOU >usually get to<YOUR >job?
Walk 01
Bicycle 02
Driver 03
Passenger 04
Local or community bus service 05
Express bus service 06
Vanpool service / Valley Metro Vanpool 07
Dial-A-Ride/Paratransit 08
School Bus 09
Motorcycle/Moped 10
Taxi 11
Shuttle/Limousine 12
OTHER, SPECIFY 97
DK/RF 99

P23. Does<YOUR >employer offer to pay all or part of the cost for parking at work?
YES, AND USE IT 1
YES, BUT DON'T USE IT 2
NO 3
DK/RF 9

P24. How much, if anything, do/does<YOU >personally pay to park at<YOUR >job?

P25. What time period does that payment cover?
Hour 1
Day..... 2
Week..... 3
Month 4
Semester..... 5
Year 6
OTHER, SPECIFY 7
DK 8
RF 9

P26. Does<YOUR >employer offer to pay for all or part of the cost for a bus pass?
Yes, and<YOU >use it 1
Yes, but<YOU >don't use it..... 2
No 3
DK/RF 9

P27. How many paying jobs do/does<YOU >hold?
ONE 1
TWO..... 2
THREE OR MORE..... 3
DK/RF 9

P28. [IF MORE THAN 1 JOB] How many hours a week on average, do/does<YOU>work at your second job?

School Related Questions
P29. What is the highest level of education<YOU>have/has attained?
11TH GRADE OR LESS 1
HIGH SCHOOL GRADUATE 2
2 YEARS OF COLLEGE/ASSOCIATES DEGREE 3
4 YEARS OF COLLEGE/BACHLORS DEGREE 4
POST-GRADUATE 5
OTHER, SPECIFY 7
DK/RF 9

P30. Are/Is<YOU >currently enrolled in any type of school?
Yes..... 1
No 2
DK..... 8
RF..... 9

P31. [IF STUDENT] How many days per week do/does<YOU>go to this place? 1 TO 7 DAYS

P32. What is the name of the school?

P33. What is the address of the school?

P34. What is the name of a street that crosses near

P35. School zip

P36. School city

P37. How do<YOU >usually get to school?
Driver (Auto/truck/van) 01
Passenger (Auto/truck/van) 02
Local/community bus service 03
Express Bus service 04
Vanpool service / Valley Metro Vanpool 05
Dial-A-Ride 06
School Bus 07
Taxi/shuttle bus/limousine 08
Motorcycle/moped 09
Bicycle 10
Walk 11
OTHER, SPECIFY 97
DK/RF 99

P38. [IF STUDENT AND AGE>15] How much, if anything, do<YOU >personally pay to park at school?

P39. What time period does that payment cover?
Hour 1
Day 2
Week 3
Month 4
Semester 5
Year 6
OTHER, SPECIFY 7
DK 8
RF 9

P40. [IF HOME INTERNET SERVICE INDICATED AT START OF INTERVIEW AND AGE>17] Earlier you indicated that you had home Internet service. Where do/does<YOU>use the Internet most often?
DON'T USE INTERNET 0
Home 1
Work - MUST BE EMPLOYED 2
School - MUST BE STUDENT 3
OTHER, SPECIFY 7
DK/RF 9

P41. [IF USE INTERNET] For what purposes do you use the Internet? MULTIPLE RESPONSE
SHOPPING (BOTH BROWSING AND PURCHASING) 1
BANKING 2
RESEARCH PRODUCTS/INFORMATION/TRAVEL INFO, ETC 3
COMMUNICATIONS WITH FAMILY, FRIENDS, COLLEAGUES 4
GENERAL SURFING 5
CHAT ROOMS/INSTANT MESSAGING 6
OTHER, SPECIFY 7
DK/RF 9

Remaining Household Questions

H11. What was the total household income in 2000 from all sources before taxes, for all members of your household? Was it above or below $35,000?

Below $35,000 1
$35,000 or above 2
DK 8
RF 9

H12. I will read you a series of income ranges. Please stop me when I read the range that is closest to your household's.

Less than $10,000 1
$10,000 to $19,999 2
$20,000 to $34,999 3
$35,000 to $49,999 4
$50,000 to $69,999 5
$70,000 or more 6
DK 8
RF 9

H13. [IF INCOME <$20,000] Does your household receive income from any of the following sources:

Welfare 1
Social Security 2
Disability 3
Veteran's benefits 4
Other governmental sources 5
NONE 6
OTHER, SPECIFY 7
DK/RF 9

H14. How many telephone lines do you have? This does not include cell phones.

H15. How many of those telephone lines are only used for a fax or modem?

H16. Have there been times within the past 12 months when the home you were living in did not have telephone service for reasons other than brief service or equipment problems?

YES 1
NO 2
DK 8
RF 9

H17. [IF YES TO H16] How long were you without phone service? Was it . . .

Less than 2 weeks 1
2 weeks to less than 1 month 2
1 month to less than 3 months 3
3 months to less than 6 months 4
6 months or more 5
DK 8
RF 9

H18. How many cellular phones does your household have?

Thank you for completing Part One of the survey. In Part Two, people in your household are asked to record their travel for two days in a log that we'll mail to you. The log package will contain instructions and more information about the survey. Are there any questions about the log that I can answer now? Okay. Your household should keep track of their travel on READ DATE. Is this okay?

H19. To collect your travel log information after your travel day, we will need to call you back. When we do this, should we call you at this telephone number, or is there a different phone number where you would prefer to be called?

This number 1
Different number 2

H20. [IF DIFFERENT NUMBER] And what is the number?

H21. At what time would you like us to call you to retrieve your travel information?
8am to 11:59am 1
12-noon to 3:59pm 2
4pm to 7:59pm 3
8pm to 11:59pm 4

H22. To mail your package, I need to obtain/verify your home address. Is it: <HADDR > <HSUIT > <HCITY > <HZIP1>

H23. Does<RESPN >have an email address that is checked daily? IF YES: What is it?
YES, RECORD RESPONSE 1
NO, DO NOT HAVE EMAIL ADDRESS THAT'S CHECKED DAILY 2
DK/RF 9

H24. And I'd like to confirm that I reached you at<PHONE >. Is this correct?
YES..... 1
NO..... 2

H25. [IF NO] What phone number did I reach you at? FORMAT: ###-###-####

Thank you for helping us. We'll call you on the day before your travel day to make sure you received your travel logs and to answer any questions you might have. Have a nice evening/day. Goodbye.

APPENDIX B: RETRIEVAL QUESTIONNAIRE

Maricopa Regional Household Activity Survey
Retrieval Questionnaire
(Travel Information)

NOTE: Text in CAPS is not read by interviewer; text in upper and lower case is read by interviewer.

Introduction

Hi - my name is _____ and I'm calling on behalf of the Maricopa Association of Governments about the survey your household recently completed. May I please speak with<FIRSTNAME ><LASTNAME >?

Verify Previous Data

I'm calling to collect your travel information. First I need to verify that the information we show for your household is correct. I'd like to start by verifying the address where you live. Is it <ADDRESS>?

A. Our records show that there are <HHSIZE> people living in your household. Is this correct?

B. Okay- now I need to confirm the name, age and gender we have for each household member.
VERIFY NAME, AGE, GENDER, IF EMPLOYED AND IF STUDENT FOR EACH HH MEMBER.

C. CHECK THAT YOU HAVE AN ADDRESS/CROSS STREETS LOCATION FOR ALL HABITUAL (WORK AND SCHOOL) ADDRESSES

D. FOR EACH STUDENT IN HOUSEHOLD, ASK IF THEY WENT TO SCHOOL ON THE TRAVEL DAY. RECORD YES OR NO. IF THEY DID NOT, RECORD THE REASON WHY

E. FOR EACH EMPLOYEE/WORKER IN HOUSEHOLD, ASK IF THEY WENT TO WORK ON THE TRAVEL DAY. RECORD YES OR NO. IF THEY DID NOT, RECORD THE REASON WHY

F. In terms of vehicles available to your household, we show that you have <HHVEH> available. Is that right?

Identify Informant – Respondent / Other HH Member

A. Great, now I'd like to collect the trip information your household recorded for<TRAVEL DAYS > We'll begin with your information. Do you have your diary handy?

1 YES, HAS DIARIES OR WILL GET THEM
2 NO, DOESN'T HAVE DIARIES. NEED TO RECONSTRUCT THE TRAVEL DAYS WITH THE RESPONDENT.
3 REFUSED, DOESN'T WANT TO PARTICIPATE

B. IF OTHER HH MEMBER: ENTER THE NUMBER OF THE PERSON WHOSE TRAVEL/ ACTIVITY INFO YOU ARE GETTING NOW.

C. WAS THIS PERSON INTERVIEWED?
YES.....1
NO, PROXY.....2

D. [IF PROXY] WHICH PERSON SERVED AS PROXY? ENTER PERSON NUMBER FROM SAMPLE SHEET

E. Did<YOU/HE/SHE >use<YOUR/HIS/HER >diary to record<THEIR >travel?
YES.....1
NO 2
DK/RF 9

F. How many total places did<YOU/HE/SHE>visit over the course of the first travel day? VERIFY AGAINST TRIP SUMMARY AT END OF INTERVIEW.

G. How many total places did <YOU/HE/SHE> visit over the course of the second travel day? VERIFY

Place / Activity Information for Place 1 (Day 1 and Day 2)

1. What time did you wake up on your <first/second> travel day? ENTER IN MILITARY TIME

2. Where were you at 3 a.m. on your <first/second> travel day?
   1=HOME
   2=SCHOOL
   3=WORK
   4=OTHER PLACE – Previously entered or someone else's habitual address
   5=NEW PLACE
   6=OUT OF AREA (Specify city and state)

IF NEW PLACE:
   A. Does the place have a name?
   B. Can you tell me which city that is in?
   C. CONFIRM ARIZONA
   D. What is the street address (RECORD FULL STREET ADDRESS)?
   E. Can you tell me the names of two cross streets nearest to that location?
   F. Is there a landmark nearby? (THIS CAN BE A CONVENIENCE STORE, STATUE, PUBLIC BLDG)
   G. Do you know the zip code for that location?

3. What type of place is it?
   1=Office building
   2=Retail
   3=Industrial
   4=Medical
   5=Educational (12th grade or less)
   6=Educational (higher than 12th grade)
   7=Government
   8=Residential
   9=Open / Public place (bus stop, park, church, other recreational sites)
   97=Other (specify)
   98=DON'T KNOW
   99=REFUSED

4. What was your main activity there?
   WORKING AT HOME (RELATED TO MAIN OR SECOND JOB) 01
   SHOPPING AT HOME 02
   OTHER AT HOME ACTIVITIES 03
   CHANGE MODE OF TRANSPORTATION 04
   PICK UP SOMEONE OR GET PICKED UP 05
   DROP OFF SOMEONE OR GET DROPPED OFF 06
   ATM, BUY GAS, QUICK STOP FOR COFFEE, NEWSPAPER, ETC. 07
   SHOPPING 08
   BANKING, POST OFFICE, PAY BILLS 09
   OTHER PERSONAL (SPECIFY) 10
   WORK (INCLUDE REGULAR SCHEDULED VOLUNTEER WORK) 11
   WORK-RELATED (SALES CALL, MEETING, ERRAND, ETC.) 12
   SCHOOL (ATTENDING CLASSES) 13
   OTHER SCHOOL ACTIVITIES (SPORTS, EXTRA-CURRICULAR) 14
   CHILDCARE, DAY CARE, AFTER SCHOOL CARE 15
   EAT MEAL (RESTAURANT, DRIVE THROUGH, TAKE-OUT) 16
   MEDICAL 17
   FITNESS ACTIVITY (PLAYING SPORTS, GYM, BIKE RIDE) 18
   RECREATIONAL (VACATION, CAMPING, ETC.) 19
   ENTERTAINMENT (WATCHING SPORTS, MOVIES, DANCE, BAR, ETC.) 20
   VISIT FRIENDS/ RELATIVES 21
   COMMUNITY MEETINGS, POLITICAL / CIVIC EVENT, PUBLIC HEARING 22
   OCCASIONAL VOLUNTEER WORK 23
   CHURCH, TEMPLE, RELIGIOUS MEETING 24
   WITH ANOTHER PERSON AT THEIR ACTIVITY OUT OF HOME 25
   OTHER ACTIVITY (SPECIFY) 97
   DK/RF 99

5. And what other activities did <YOU/HE/SHE> do there?
   NO OTHER ACTIVITIES....00
   WORKING AT HOME (RELATED TO MAIN OR SECOND JOB)....01
   SHOPPING AT HOME....02
   OTHER AT HOME ACTIVITIES....03
   CHANGE MODE OF TRANSPORTATION....04
   PICK UP SOMEONE OR GET PICKED UP....05
   DROP OFF SOMEONE OR GET DROPPED OFF....06
   ATM, BUY GAS, QUICK STOP FOR COFFEE, NEWSPAPER, ETC. 07
   SHOPPING....08
   BANKING, POST OFFICE, PAY BILLS....09
   OTHER PERSONAL (SPECIFY)....10
   WORK (INCLUDE REGULAR SCHEDULED VOLUNTEER WORK) 11
   WORK-RELATED (SALES CALL, MEETING, ERRAND, ETC.)....12
   SCHOOL (ATTENDING CLASSES) 13
   OTHER SCHOOL ACTIVITIES (SPORTS, EXTRA-CURRICULAR) 14
   CHILDCARE, DAY CARE, AFTER SCHOOL CARE 15
   EAT MEAL (RESTAURANT, DRIVE THROUGH, TAKE-OUT)....16
   MEDICAL....17
   FITNESS ACTIVITY (PLAYING SPORTS, GYM, BIKE RIDE) 18
   RECREATIONAL (VACATION, CAMPING, ETC.)....19
   ENTERTAINMENT (WATCHING SPORTS, MOVIES, DANCE, BAR, ETC.) 20
   VISIT FRIENDS/ RELATIVES....21
   COMMUNITY MEETINGS, POLITICAL / CIVIC EVENT, PUBLIC HEARING 22
   OCCASIONAL VOLUNTEER WORK 23
   CHURCH, TEMPLE, RELIGIOUS MEETING 24
   WITH ANOTHER PERSON AT THEIR ACTIVITY OUT OF HOME....25
   OTHER ACTIVITY (SPECIFY)....97
   DK/RF....99

6. Did you go anywhere else that day?
   1 YES
   2 NO
7. [IF PLACE 1 AND ANSWER IS NO] So you made no trips, including for work or school? Why not?

8. [IF YES] What time did you leave for the next place? MILITARY TIME
COMPUTE ACTIVITY DURATION. IF COMPUTED DURATION IS NEGATIVE, FLAG AS INVALID.

Place / Activity Information Place 1 does not have any travel mode information.

9. Where did you go next? PROBE: DID YOU MAKE ANY STOPS ALONG THE WAY?
   1=HOME
   2=SCHOOL
   3=WORK
   4=OTHER PLACE – Previously entered or someone else's habitual address
   5=NEW PLACE
   6=OUT OF AREA (Specify city and state)
   7=NO PLACE ELSE THAT TRAVEL DAY

   IF NEW PLACE:
   A. Does the place have a name?
   B. Can you tell me which city that is in?
   C. CONFIRM ARIZONA
   D. What is the street address (RECORD FULL STREET ADDRESS)?
   E. Can you tell me the names of two cross streets nearest to that location?
   F. Is there a landmark nearby? (THIS CAN BE A CONVENIENCE STORE, PUBLIC BLDG)
   G. Do you know the zip code for that location?

10. What type of place is it?
    1=Office building
    2=Retail
    3=Industrial
    4=Medical
    5=Educational (12th grade or less)
    6=Educational (higher than 12th grade)
    7=Government
    8=Residential
    9=Open / Public place (bus stop, park, church, other recreational sites)
    97=Other (specify)
    98=DON'T KNOW
    99=REFUSED

11. What time did you arrive there? MILITARY TIME
COMPUTE TRIP DURATION. IF COMPUTED DURATION IS NEGATIVE, FLAG AS INVALID.

12. How did you get there?
    1=Walk
    2=Bicycle
    3=Driver
    4=Passenger
    5=Local or community bus service
    6=Express bus service
    7=Vanpool service / Valley Metro Vanpool
    8=Dial-a-Ride
    9=School Bus
    10=Motorcycle/Moped
    11=Taxi
    12=Shuttle Bus/Limousine
    97=Other (specify)

13. How many others traveled with <YOU/HIM/HER>? THIS EXCLUDES RESPONDENT

14. Of those, how many were household members? CANNOT BE GREATER THAN VALUE IN Q13
    COMPUTE NON-HOUSEHOLD MEMBERS = Q13 – Q14

15. [IF Q14>0] Who was/were the household members traveling with you? ENTER PERSON NUMBERS

16. [IF MODE = 3 OR 4] Was a household vehicle used to make this trip?
    1 YES
    2 NO

17. [IF Q15=3] Which household vehicle did <YOU/HE/SHE> use? ENTER VEHICLE NUMBER

18. [IF MODE = 5 OR 6] At which bus stop did you board? ENTER CROSS STREETS AND CITY

19. [IF MODE = 5 OR 6] What time did <YOU/HE/SHE> arrive at the bus stop? MILITARY TIME

20. [IF MODE = 5 OR 6] How did <YOU/HE/SHE> get to the bus stop?
    1=Walk
    2=Drove and parked
    3=Was dropped off
    4=Rode bike
    5=Other (specify)

21. [IF MODE = 5 OR 6] At which bus stop did you get off? ENTER CROSS STREETS AND CITY

22. [IF MODE = 5 OR 6] What time did <YOU/HE/SHE> get off at that stop? MILITARY TIME

23. [IF MODE = 5 OR 6] How did <YOU/HE/SHE> get from the bus stop to your next place?
    1=Walk
    2=Got in parked car and drove

3=Was picked up
4=Rode bike
5=Caught new bus at this stop
6=Other (specify)

24. [IF MODE = 5 OR 6] What bus route or line was that?

25. [IF MODE = 5 OR 6] How much did it cost to make that bus trip? FORMAT 999.99
FREE=0, DK/RF=999.99

26. [IF MODE = 5 OR 6] How did <YOU/HE/SHE> pay for that trip?
1=Cash
2=Credit Card
3=Pass
4=Transfer
7=Other (specify)

27. What was your main activity there?

WORKING AT HOME (RELATED TO MAIN OR SECOND JOB)	01
SHOPPING AT HOME	02
OTHER AT HOME ACTIVITIES	03
CHANGE MODE OF TRANSPORTATION	04
PICK UP SOMEONE OR GET PICKED UP	05
DROP OFF SOMEONE OR GET DROPPED OFF	06
ATM, BUY GAS, QUICK STOP FOR COFFEE, NEWSPAPER, ETC.	07
SHOPPING	08
BANKING, POST OFFICE, PAY BILLS	09
OTHER PERSONAL (SPECIFY)	10
WORK (INCLUDE REGULAR SCHEDULED VOLUNTEER WORK)	11
WORK-RELATED (SALES CALL, MEETING, ERRAND, ETC.)	12
SCHOOL (ATTENDING CLASSES)	13
OTHER SCHOOL ACTIVITIES (SPORTS, EXTRA-CURRICULAR)	14
CHILDCARE, DAY CARE, AFTER SCHOOL CARE	15
EAT MEAL (RESTAURANT, DRIVE THROUGH, TAKE-OUT)	16
MEDICAL	17
FITNESS ACTIVITY (PLAYING SPORTS, GYM, BIKE RIDE)	18
RECREATIONAL (VACATION, CAMPING, ETC.)	19
ENTERTAINMENT (WATCHING SPORTS, MOVIES, DANCE, BAR, ETC.)	20
VISIT FRIENDS/ RELATIVES	21
COMMUNITY MEETINGS, POLITICAL / CIVIC EVENT, PUBLIC HEARING	22
OCCASIONAL VOLUNTEER WORK	23
CHURCH, TEMPLE, RELIGIOUS MEETING	24
WITH ANOTHER PERSON AT THEIR ACTIVITY OUT OF HOME	25
OTHER ACTIVITY (SPECIFY)	97
DK/RF	99

28. What other activities do you do while you were there?
    NO OTHER ACTIVITIES 00
    WORKING AT HOME (RELATED TO MAIN OR SECOND JOB) 01
    SHOPPING AT HOME 02
    OTHER AT HOME ACTIVITIES 03
    CHANGE MODE OF TRANSPORTATION 04
    PICK UP SOMEONE OR GET PICKED UP 05
    DROP OFF SOMEONE OR GET DROPPED OFF 06
    ATM, BUY GAS, QUICK STOP FOR COFFEE, NEWSPAPER, ETC. 07
    SHOPPING 08
    BANKING, POST OFFICE, PAY BILLS 09
    OTHER PERSONAL (SPECIFY) 10
    WORK (INCLUDE REGULAR SCHEDULED VOLUNTEER WORK) 11
    WORK-RELATED (SALES CALL, MEETING, ERRAND, ETC.) 12
    SCHOOL (ATTENDING CLASSES) 13
    OTHER SCHOOL ACTIVITIES (SPORTS, EXTRA-CURRICULAR) 14
    CHILDCARE, DAY CARE, AFTER SCHOOL CARE 15
    EAT MEAL (RESTAURANT, DRIVE THROUGH, TAKE-OUT) 16
    MEDICAL 17
    FITNESS ACTIVITY (PLAYING SPORTS, GYM, BIKE RIDE) 18
    RECREATIONAL (VACATION, CAMPING, ETC.) 19
    ENTERTAINMENT (WATCHING SPORTS, MOVIES, DANCE, BAR, ETC.) 20
    VISIT FRIENDS/ RELATIVES 21
    COMMUNITY MEETINGS, POLITICAL / CIVIC EVENT, PUBLIC HEARING 22
    OCCASIONAL VOLUNTEER WORK 23
    CHURCH, TEMPLE, RELIGIOUS MEETING 24
    WITH ANOTHER PERSON AT THEIR ACTIVITY OUT OF HOME 25
    OTHER ACTIVITY (SPECIFY) 97
    DK/RF 99

29. Did you go to any other location on your <first/second> travel day?
    1 YES
    2 NO

30. [IF YES] What time did you leave for the next place? MILITARY TIME

APPENDIX C: RESPONDENT MATERIALS

Maricopa Regional
Household Travel Survey
c/o NuStats
801 E. William Cannon, Suite 115
Austin, Texas 78745

RESPONDENT PACKET LETTER

«TODAY»

«FIRSTNAME» «LASTNAME»
«ADDRESS»
«CITY», «STATE» «ZIP»

Dear «LASTNAME» Family:

Thank you for agreeing to participate in the **Maricopa Regional Household Travel Survey.** You and your family are helping to improve regional transportation by providing information about your daily travel.

Good information on how, why, and where people make their daily trips helps make better use of increasingly scarce resources and develop strategies for making wise transit and highway investments. Your participation is important for reaching these goals.

The survey is being conducted by NuStats on behalf of the Maricopa Association of Governments (MAG). NuStats ensures that **all information collected is strictly confidential and will be used for research purposes only**. The information from your household will be used only in combination with data from 4,000 other participating households throughout the valley.

For more information about this important survey and a list of frequently asked questions, please visit the survey web site at *www.nustats.com*.

A survey specialist will call to collect your information after your assigned two-day travel period. Please keep your diaries until he/she calls you.

We appreciate your time and help with this very important project. If you have any questions or comments, please call Ratna Korepella (602-254-6300) at the Maricopa Association of Governments or myself (888-687-8287, extension 4055, sbricka@nustats.com) at NuStats.

Sincerely,

Stacey Bricka

Research Director, NuStats

Brochure (from pdf file)

Travel Diary (from PDF file)

APPENDIX D: DATA SET CODE BOOKS

Household File

SAMPN	HH ID Number	1
HHADDR	Household Location Reference Number (to link to location file)	2
AREATYPE	Area Type	3

Value	Label
1	CBD
2	Outlying CBD
3	Mixed urban
4	Suburban
5	Rural
9	Apache Junction

LANG	Interview Language	6

Value	Label
1	English
2	Spanish

HHVEH	Number of motorized vehicles available for use by HH members	7
BIKES	Number of bicycles	8
HHSIZE	Household Size	9
ETHN	Ethnicity	10

Value	Label
1	White/non Hispanic
2	Hispanic
3	African American
4	Asian/Pacific Islander
5	American Indian/Native American
7	Other
9	DK/RF

O_ETHN	Other Ethnicity	11
WRKR	Number of HH workers	18
DWELTYPE	Type of dwelling unit	19

Value	Label
1	Unattached Single Family Home
2	Duplex
3	Apartment
4	Condominium or townhouse
5	Mobile home or trailer
6	Group quarters (dorms,barracks,etc)
7	Other (specify)
9	DK/RF

DWELO	Other type of dwelling	20
OWN	Owner/Renter Status	28

Value	Label
1	Own/buying
2	Rent
7	Other
9	DK/RF

O_OWN	Other Owner/Renter Status	29
TENURE	Tenure at dwelling unit	37

Value	Label
1	Less than 1 year
2	1-3 years
3	4-5 years
4	more than 5 years
9	DK/RF

```
COMPTR    Computer Ownership Status                                    38
          Value    Label
              1    Yes
              2    No
              8    DK
              9    RF

INTERNET  Internet Service Status                                      39
          Value    Label
              1    Yes
              2    No
              8    DK
              9    RF

INTACC    Internet Access Type                                         40
          Value    Label
              0    None
              1    Dial-up/Modem with tones
              2    High Speed Connections
              3    Web TV
              7    Other
              9    DK/RF

INTACCO   Other Internet Access Type                                   41

PHLNS     Number of telephone lines                                    49
          Value    Label
             98    DK
             99    RF

FAXMODEM  Number of telephone lines used exclusively for Fax or Modem  50
          Value    Label
             98    DK
             99    RF

NOPHN     Lack of phone service                                        51
          Value    Label
              1    Yes
              2    No
              8    DK
              9    RF

LENGTH    Lack of phone service                                        52
          Value    Label
              1    Less than 2 weeks
              2    2 weeks to less than 1 month
              3    1 month to less than 3 months
              4    3 months to less than 6 months
              5    6 months to less than 1 year
              8    DK
              9    REFUSED

INCAT     Income Category                                              53
         Value    Label
              1    Below 35K
              2    35K or above
              8    DK
              9    RF

INCOME    Total 2000 annual household income                           54
          Value    Label
              1    <$10,000
              2    $10,000 - $19,999
              3    $20,000 - $34,999
              4    $35,000 - $49,999
              5    $50,000 - $69,999
              6    $70,000 +
              8   DK
              9   RF
```

OINC Welfare recipient 55

Value	Label
1	Welfare
2	Social security
3	Disability
4	Veterans benefits
5	Other government benefits
6	NONE
7	Other
9	DK/RF

OINCO Other Welfare Source 56

CELLP Number of HH Cell Phones 64

Value	Label
98	DK
99	RF

RECONT Recontact preference 65

Value	Label
1	This number
2	Different number

EMAIL Email address 66

Value	Label
1	Yes
2	No
9	DK

EMAILA Email Address 67

DIFFPHON Different phone 75

ASSN Travel Day 77

Value	Label
178	Sun/Mon, March 18-19
179	Mon/Tue, March 19-20
180	Tue/Wed, March 20-21
181	Wed/Thu, March 21-22
182	Thu/Fri, March 22-23
183	Fri/Sat, March 23-24
185	Sun/Mon, March 25-26
186	Mon/Tue, March 26-27
187	Tue/Wed, March 27-28
188	Wed/Thu, March 28-29
189	Thu/Fri, March 29-30
190	Fri/Sat, March 30-31
193	Mon/Tue, April 2-3
194	Tue/Wed, April 3-4
195	Wed/Thu, April 4-5
196	Thu/Fri, April 5-6
197	Fri/Sat, April 6-7
200	Mon/Tue, April 9-10
201	Tue/Wed, April 10-11
202	Wed/Thu, April 11-12
207	Mon/Tue, April 16-17
208	Tue/Wed, April 17-18
209	Wed/Thu, April 18-19
210	Thu/Fri, April 19-20
211	Fri/Sat, April 20-21
213	Sun/Mon, April 22-23
214	Mon/Tue, April 23-24
215	Tue/Wed, April 24-25
216	Wed/Thu, April 25-26
217	Thu/Fri, April 26-27
218	Fri/Sat, April 27-28
220	Sun/Mon, April 29-30
221	Mon/Tue, April 30-May 1
222	Tue/Wed, May 1-2
223	Wed/Thu, May 2-3
224	Thu/Fri, May 3-4

```
225    Fri/Sat, May 4-5
227    Sun/Mon, May 6-7
228    Mon/Tue, May 7-8
229    Tue/Wed, May 8-9
230    Wed/Thu, May 9-10
231    Thu/Fri, May 10-11
232    Fri/Sat, May 11-12
235    Mon/Tue, May 14-15
236    Tue/Wed, May 15-16
237    Wed/Thu, May 16-17
238    Thu/Fri, May 17-18
239    Fri/Sat, May 18-19
332    Sun/Mon, August 19-20
333    Mon/Tue, August 20-21
334    Tue/Wed, August 21-22
335    Wed/Thu, August 22-23
336    Thu/Fri, August 23-24
337    Fri/Sat, August 24-25
339    Sun/Mon, August 26-27
340    Mon/Tue, August 27-28
341    Tue/Wed, August 28-29
342    Wed/Thu, August 29-30
343    Thu/Fri, August 30-31
344    Fri/Sat, August 31-September 1
346    Sun/Mon, September 2-3
347    Mon/Tue, September 3-4
348    Tue/Wed, September 4-5
349    Wed/Thu, September 5-6
350    Thu/Fri, September 6-7
351    Fri/Sat, September 7-8
353    Sun/Mon, September 9-10
354    Mon/Tue, September 10-11
355    Tue/Wed, September 11-12
356    Wed/Thu, September 12-13
357    Thu/Fri, September 13-14
358    Fri/Sat, September 14-15
360    Sun/Mon, September 16-17
361    Mon/Tue, September 17-18
362    Tue/Wed, September 18-19
363    Wed/Thu, September 19-20
364    Thu/Fri, September 20-21
365    Fri/Sat, September 21-22
367    Sun/Mon, September 23-24
368    Mon/Tue, September 24-25
369    Tue/Wed, September 25-26
370    Wed/Thu, September 26-27
371    Thu/Fri, September 27-28
372    Fri/Sat, September 28-29
374    Sun/Mon, September 30-October 1
375    Mon/Tue, October 1-2
376    Tue/Wed, October 2-3
377    Wed/Thu, October 3-4
378    Thu/Fri, October 4-5
379    Fri/Sat, October 5-6
382    Mon/Tue, October 8-9
383    Tue/Wed, October 9-10
384    Wed/Thu, October 10-11
385    Thu/Fri, October 11-12
386    Fri/Sat, October 12-13
389    Mon/Tue, October 15-16
390    Tue/Wed, October 16-17
391    Wed/Thu, October 17-18
392    Thu/Fri, October 18-19
393    Fri/Sat, October 19-20
396    Mon/Tue, October 22-23
397    Tue/Wed, October 23-24
398    Wed/Thu, October 24-25
399    Thu/Fri, October 25-26
400    Fri/Sat, October 26-27
404    Tue/Wed, October 30-31
405    Wed/Thu, October 31-November 1
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	406 Thu/Fri, November 1-2	
	407 Fri/Sat, November 2-3	
	410 Mon/Tue, November 5-6	
	411 Tue/wed, November 6-7	
	413 Thu/Fri, November 8-9	
	414 Fri/Sat, November 9-10	
	418 Tue/Wed, November 13-14	
	419 Wed/Thu, November 14-15	
	420 Thu/Fri, November 15-16	
	421 Fri/Sat, November 16-17	
	424 Mon/Tue, November 19-20	
DAYOFWK1	Travel Day 1	78
	Value Label	
	1 Sunday	
	2 Monday	
	3 Tuesday	
	4 Wednesday	
	5 Thursday	
	6 Friday	
	7 Saturday	
DAYOFWK2	Travel Day 2	79
	Value Label	
	1 Sunday	
	2 Monday	
	3 Tuesday	
	4 Wednesday	
	5 Thursday	
	6 Friday	
	7 Saturday	
NSTUD	Number of HH Students	80
HHPLD1	Number of Household Places - Day 1	81
HHPLD2	Number of Household Places - Day 2	82
PLTOTAL	Total Number of HH Places	83
HHTRPD1	Number of HH Trips - Day 1	84
HHTRPD2	Number of HH Trips - Day 2	85
TRTOTAL	Total Number of HH Trips	86

Person File

SAMPN	HH ID number	1
PERNO	Person ID number	2
W1_ADDR	Work 1 Reference Number (link to location file)	3
S1_ADDR	School 1 Reference Number (link to location file)	4
RESP	Respondent flag	5

Value	Label
1	Yes
2	No

FNAME	First Name	6
LNAME	Last name	9
RELATION	Relation to head	13

Value	Label
1	SELF
2	Spouse/partner
3	Son/Daughter
4	Mother/Father/Mother-in-law/Father-in-law
5	Other relative
6	Live-in help
7	Not related
9	DK/RF

GENDER	Person X - Gender	14

Value	Label
1	Male
2	Female
9	DK/RF

AGE	Person X - Age	15

Value	Label
999	DK/RF

LIC	Person X - Valid drivers	16

Value	Label
1	Yes
2	No
8	Don't Know
9	Refused

DISAB	Disability status	17

Value	Label
1	Yes
2	No
9	DK/RF

DISTY	Disability Type	18

Value	Label
0	None
1	Difficulty standing, walking or climbing stairs
2	Visually impaired/blind
3	Hearing impaired/deaf
4	Wheelchair
5	Require cane/walker
7	Other
9	DK/RF

DISTYO	Other disability	19
TAG	Disabled Parking Tag	27

Value	Label
1	Yes
2	No
9	Refused

PRIMACT Work Status 28

Value	Label
1	Employed full- or part-time
2	Self-employed
3	Regular volunteer work (treat as worker for part-time)
4	Unemployed
5	Retired
6	Full-time homemaker
7	Other
9	DK/RF

O_PRMACT Other Work Status 29

HRSWRK Total number of hours worked per week at main job 37

Value	Label
97	97 + hours
98	Don't know
99	Refused

WKSCHD Work Schedule 38

Value	Label
1	Hours fixed and the same every day
2	Hours vary at my choice
3	Hours allowed to vary within fixed limit
4	Fixed starting time, but variable ending time
5	Fixed hours, but different hours on different day
6	Variable depending on work/season
7	OTHER, SPECIFY
9	DK/RF

WRKST Work start time 39

Value	Label
9999	DK

WRKEND Work end time 40

Value	Label
9999	DK

WKNAM Employer Name 41

Value	Label
1	Self-employed
2	Business Name Given
9	DK/RF

WKNAMO Specify Employer Name 42

W1OCC Occupation 50

Value	Label
1	EXECUTIVE, ADMIN, OR MANAGERIAL
2	PROFESSIONAL SPECIALTY
3	TECHNICIAN OR RELATED SUPPORT
4	SALES
5	ADMINISTRATIVE SUPPORT, CLERICAL
6	PRIVATE HOUSEHOLD
7	PROTECTIVE SERVICES
8	SERVICE, EXCEPT PROTECTIVE AND HOUSEHOLD
9	FARMING, FORESTRY OR FISHING
10	PRECISION, PRODUCTION, CRAFT OR REPAIR
11	MACHINE OPERATOR, ASSEMBLER OR INSPECTOR
12	TRANSPORTATION OR MATERIAL MOVING
13	HANDLER, EQUIPMENT CLEANER, HELPER OR LABORER
97	OTHER
98	DK
99	RF

W1OCCO Other occupation 51

WKLOC	Work location flag	59

Value	Label
1	Home
2	Fixed location
3	No fixed address (e.g. traveling salesman, repairman, etc.)
9	DK/RF

WTENURE	Tenure at work location	60

Value	Label
1	Less than a year
2	1 to 3 years
3	4 to 5 years
4	More than 5 years
9	DK/RF

WMODE	Mode to work	61

Value	Label
1	Walk
2	Bicycle
3	Driver
4	Passenger
5	Local or community bus service
6	Express bus service
7	Vanpool service/Valley metro vanpool
8	Dial-a-ride/Paratransit
9	School bus
10	Motorcycle/Moped
11	Taxi
12	Shuttle/limousine
97	Other, (Specify)
99	DK/RF

WMODO	Other mode to work	62

WPRKS	Employer Parking Subsidy	70

Value	Label
1	Yes, and I use it
2	Yes, but I don't use it
3	No
9	DK/RF

WPARK	Cost to park at work	71

Value	Label
.00	Free
999999.00	DK/RF

WPAYU	Parking pay unit	72

Value	Label
1	Hour
2	Day
3	Week
4	Month
5	Semester
6	Year
7	Other
8	DK
9	RF

WTRNS	Employer Transit Subsidy	74

Value	Label
1	Yes, and I use it
2	Yes, but I don't use it
3	No
9	DK/RF

JOBS	Number of Paying Jobs	75

Value	Label
3	3+
9	DK/RF

TTL_HRS2	Total number of hours worked per week at second job	76

	Value	Label	
	97	97+ hours	
	98	Don't know	
	99	Refused	
EDUCATE	Person X - Education		77
	Value	Label	
	1	11th grade or less	
	2	High school graduate	
	3	2 years of college/ Associate Degree	
	4	4 years of college/ Bachelor's Degree	
	5	Post-Graduate	
	7	Other	
	9	DK/RF	
OEDUCA	Other educational attainment		78
STUDENT	Student status		86
	Value	Label	
	1	Yes	
	2	No	
	8	DK	
	9	RF	
SCHDAYS	Days to school		87
	Value	Label	
	8	DK	
	9	RF	
SLOC	School Location		88
	Value	Label	
	1	Home	
	2	Another school location	
	9	DK/RF	
SMODE	Mode to school		89
	Value	Label	
	1	Driver	
	2	Passenger in car/truck/van	
	3	Local or community bus service	
	4	Express bus service	
	5	Vanpool service/Valley Metro Vanpool	
	6	Dial-A-Ride	
	7	School Bus	
	8	Taxi/shuttle bus/limousine	
	9	Motorcycle/moped	
	10	Bicycle	
	11	Walk	
	97	Other (specify)	
	99	DK/RF	
SMODEO	Other Mode to school		90
SPAY	School pay to Park		98
	Value	Label	
	.00	Free	
	999999.00	DK/RF	
SPAYU	Parking pay unit		99
	Value	Label	
	1	Hour	
	2	Day	
	3	Week	
	4	Month	
	5	Semester	
	6	Year	
	7	Other	
	8	DK	
	9	RF	

SPAYUO Other School Parking Unit 100

USEIN Where use Internet 108

Value	Label
0	Don't use Internet
1	Home
2	Work
3	School
7	Other
9	DK/RF

USEIO Other Place use Internet 109

INTPU1 Internet Use purposes 117

Value	Label
1	Shopping
2	Banking
3	Research products/Info/Travel info
4	Communicating
5	General surfing
6	Chat rooms/instant messaging
7	Other
9	DK/RF

INTPU2 Internet use purposes 118

Value	Label
1	Shopping
2	Banking
3	Research
4	Communicating
5	General surfing
6	Chat rooms/instant messaging
7	Other

INTPU3 Internet Use purposes 119

Value	Label
1	Shopping
2	Banking
3	Research
4	Communicating
5	General surfing
6	Chat rooms/instant messaging
7	Other

INTPO Other Internet Use 120

UINTR1 Use internet on Travel Day 1 128

Value	Label
1	Yes
2	No
8	DK
9	RF
94 M	Phase 1 - not asked

WINTR1A Where use Internet on Travel Day 1 129

Value	Label
1	Home
2	Work
3	School
7	Other
9	DK/RF

WINTR1B Where use Internet on Travel Day 1 130

Value	Label
1	Home
2	Work
3	School
7	Other

WINTR1C	Where use Internet on Travel Day 1	131

Value	Label
1	Home
2	Work
3	School
7	Other

WINTR1O	Other Place Where used Internet Day 1	132
IUSE1A	Internet Use Purpose Day 1	164

Value	Label
1	Shopping
2	Banking
3	Research
4	Communicating
5	General surfing
6	Chat room/instant messaging
7	Other
9	DK/RF

IUSE1B	Internet Use Purpose Day 1	165

Value	Label
1	Shopping
2	Banking
3	Research
4	Communicating
5	General surfing
6	Chat room/instant messaging
7	Other

IUSE1C	Internet Use Purpose Day 1	166

Value	Label
1	Shopping
2	Banking
3	Research
4	Communicating
5	General surfing
6	Chat room/instant messaging
7	Other

IUSE1D	Internet Use Purpose Day 1	167

Value	Label
1	Shopping
2	Banking
3	Research
4	Communicating
5	General surfing
6	Chat room/instant messaging
7	Other

IUSE1E	Internet Use Purpose Day 1	168

Value	Label
1	Shopping
2	Banking
3	Research
4	Communicating
5	General surfing
6	Chat rooms/instant messaging
7	Other

IUSE1F	Internet Use Purpose Day 1	169

Value	Label
1	Shopping
2	Banking
3	Research
4	Communicating
5	General surfing
6	Chat room/instant messaging
7	Other

IUSE1O Other Internet Use Purpose Day 1 170

UINTR2 Use Internet on Travel Day 2 202

Value		Label
1		Yes
2		No
8		DK
9		RF
94	M	Phase I - Question not asked

WINTR2A Where use Internet Day 2 203

Value	Label
1	Home
2	Work
3	School
7	Other
9	DK/RF

WINTR2B Where use Internet Day 2 204

Value	Label
1	Home
2	Work
3	School
7	Other

WINTR2C Where use Internet Day 2 205

Value	Label
1	Home
2	Work
3	School
7	Other

WINTR2O Other Place use Internet Day 2 206

IUSE2A Internet use Purpose Day 2 238

Value	Label
1	Shopping
2	Banking
3	Research
4	Communicating
5	General surfing
6	Chat room/instant messaging
7	Other
9	DK/RF

IUSE2B Internet use Purpose Day 2 239

Value	Label
1	Shopping
2	Banking
3	Research
4	Communicating
5	General surfing
6	Chat rooms/instant messaging
7	Other

IUSE2C Internet use Purpose Day 2 240

Value	Label
1	Shopping
2	Banking
3	Research
4	Communicating
5	General surfing
6	Chat rooms/instant messaging
7	Other

IUSE2D	Internet use Purpose Day 2	241

Value	Label
1	Shopping
2	Banking
3	Research
4	Communicating
5	General surfing
6	Chat rooms/instant messaging
7	Other

IUSE2E	Internet use Purpose Day 2	242

Value	Label
1	Shopping
2	Banking
3	Research
4	Communicating
5	General surfing
6	Chat rooms/instant messaging
7	Other

IUSE2F	Internet use Purpose Day 2	243

Value	Label
1	Shopping
2	Banking
3	Research
4	Communicating
5	General surfing
6	Chat rooms/instant messaging
7	Other

IUSE2O	Other Internet use Purpose Day 2	244
PLD1	Person places - Day 1	276
PLD2	Person places - Day 2	277
PLTOTAL	Total Person Places	278
TRD1	Person Trips - Day 1	279
TRD2	Person Trips - Day 2	280
TRTOTAL	Total Person Trips	281
NOTRIP	Reason for no Travel on Travel Days	282
USEDIARY	Use diary on travel dates	289

Value	Label
1	Yes
2	No
9	DK/RF

PROXY	Proxy Reporting	290

Value	Label
0	Self
1	Person 1
2	Person 2
3	Person 3
4	Person 4
5	Person 5
6	Person 6
7	Person 7

Vehicle File

SAMPN	HH ID Number	1
VEHNO	Vehicle Number	2
YEAR	Vehicle X- Year	3

Value	Label
8888	Don't know
9999	Refused

MAKE	Vehicle X- Make	4

Value	Label
1	ACURA
2	AUDI
3	BMW
4	BUICK
5	CADILLAC
6	CHEVROLET
7	CHRYSLER
8	DODGE
9	FORD
10	GEO
11	GMC
12	HARLEY DAVIDSON
13	HONDA
14	HYUNDAI
15	INFINITI
16	ISUZU
17	JAGUAR
18	JEEP
19	KAWASAKI
20	KIA
21	LEXUS
22	LINCOLN
23	MAZDA
24	MERCURY
25	MERCEDES-BENZ
26	MITSUBISHI
27	NISSAN
28	OLDSMOBILE
29	PLYMOUTH
30	PONTIAC
31	PORSCHE
32	RANGE ROVER
33	SAAB
34	SATURN
35	SATURN
36	SUZUKI
37	TOYOTA
38	VOLKSWAGEN
39	VOLVO
40	YAMAHA
97	OTHER, SPECIFY
98	DON'T KNOW
99	REFUSED

O_MAKE	Other Make	5
MODEL	Vehicle X- Model	13
BTYPE	Vehicle X Body Type	21

Value	Label
1	Auto
2	Van
3	RV
4	Sport Utility Vehicle
5	Pick up Truck
6	Other Truck
7	Motorcycle/Moped
97	Other (specify)
99	RF

OTHBTYP Other Body Type 22

OWN Owned or Leased 30

Value	Label
1	Household member own/lease
2	Employer provided
3	Rental car
4	Borrowed from fiend/relative
7	Other
9	DK/RF

OWNO Other Ownership 31

Trip File

SAMPN	HH ID Number	1
PERNO	Person ID number	2
DAYNO	Day Number	3
PLANO	Place number	4
WAKE1	Wake time - Day 1	5

Value	Label
9999	DK/RF

WAKE2	Wake time - Day 2	6

Value	Label
9999	DK/RF

LOCNO	Location Reference Number	7
PTYPE	Place Type	8

Value	Label
1	Home
2	School
3	Work
4	Someone else's habitual/already use
5	New Place
6	Out of Study Area (obtain city& state)

LU_TYPE	Land use Type	9

Value	Label
1	Office Building
2	Retail
3	Industrial Site
4	Medical
5	Educational (12th grade or less)
6	Educational (College, Trade)
7	Government
8	Residential
9	Open/Public Places
97	Other (specify)
98	DK
99	RF

LUTYPO	Other Land Use Type	10
ACT1	Primary Trip purposes	18

Value	Label
0	No other activities
1	Work at home
2	Shop from home
3	All other at home activities
4	Change mode of transportation
5	Pick up someone or get picked up
6	Drop off someone or be dropped off
7	ATM, buy gas, quick stop for coffee, newspaper, etc.
8	Shopping
9	Banking, Post Office, pay bills
10	Other Personal business
11	Work or regular volunteering
12	Work-related
13	School (attending classes)
14	Other school activities (extra-curricular)
15	Childcare, day care
16	Eat meal (restaurant, drive thru, take-out)
17	Medical
18	Fitness activity
19	Recreational
20	Entertainment
21	Visit friends/relatives
22	Community meetings, political/civic events

	23	Occasional volunteer work
	24	Church, temple, religious meeting
	25	With another person at their activities
	97	Other
	99	DK/RF

ACT2 Secondary trip purpose 19

Value	Label
0	No other activities
1	Working at home
2	Shopping at home
3	Other home activities
4	Change mode of transportation
5	Pick-up someone or get picked up
6	Drop off someone, get dropped off
7	ATM, buy gas, quick stop for coffee, etc.
8	Shopping
9	Banking, Post Office, pay bills
10	Other Personal business
11	Work
12	Work-related
13	School
14	Other school activities
15	Childcare, day care
16	Eat meal
17	Medical
18	Fitness activity
19	Recreational
20	Entertainment
21	Visit friends/relatives
22	Community meetings, political/civic event
23	Occasional volunteer work
24	Church, Temple, religious meeting
25	With another person at their activity
97	Other

ACT3 Secondary trip purposes 20

Value	Label
0	No other activities
1	Working at home
2	Working at home
3	Other home activities
4	Change mode of transportation
5	Pick-up someone or get picked up
6	Drop of someone or get dropped off
7	ATM, buy gas, quick stop for coffee, newspaper, etc.
8	Shopping
9	Banking, post office, pay bills
10	Other personal business
11	Work
12	Work-related
13	School
14	School related
15	Child care
16	Eat meal
17	Medical
18	Fitness activity
19	Recreational
20	Entertainment
21	Visit friends/relatives
22	Community meetings, political/civic events
23	Occasional volunteer work
24	Church, temple, religious meeting
25	With another at their activity
97	Other

ACT4 Secondary trip purposes 21

Value	Label
0	No other activities
1	Working at home
2	Working at home

	3	Other home activities
	4	Change mode of transportation
	5	Pick-up someone or get picked up
	6	Drop of someone or get dropped off
	7	ATM, buy gas, quick stop for coffee, newspaper, etc.
	8	Shopping
	9	Banking, post office, pay bills
	10	Other personal business
	11	Work
	12	Work-related
	13	School
	14	School related
	15	Child care
	16	Eat meal
	17	Medical
	18	Fitness activity
	19	Recreational
	20	Entertainment
	21	Visit friends/relatives
	22	Community meetings, political/civic events
	23	Occasional volunteer work
	24	Church, temple, religious meeting
	25	With another at their activity
	97	Other

ACT1O	Other Primary Activity	22
ACT2O	Other Secondary Activity	30
ARRTIM	Arrival time	38
DEPTIM	Departure time	39
MODE	Mode of trip	40

Value	Label
1	Walk
2	Bicycle
3	Driver
4	Passenger
5	Local or community bus service
6	Express bus service
7	Vanpool service/ Valley Metro Vanpool
8	Dial-A-Ride/Paratransit
9	School Bus
10	Motorcycle/Moped
11	Taxi
12	Shuttle/Limo
97	Other(specify)
99	DK/RF

OTHMODE	Other Mode	41
PARTY	Members in Travel party	49

Value	Label
99	DK/RF

HH_MEM	Number of household members on trip	50
PER_TRP	Person on trip	51
NONHH	Number of non-HH Members traveling	58

Value	Label
99	DK/RF

HHVEH	Household vehicle used	59

Value	Label
1	Yes
2	No
8	DK
9	RF

```
VEHNO     Vehicle Used                                              60
          Value    Label
             97    Non-household vehicle
             99    DK/RF

HIGHWAY   Highway Use                                               61
          Value    Label
              1    Yes
              2    No
              8    DK
              9    RF

BOARD     Boarding Station                                          62

BSARR     Time arrived at bus stop                                  70
          Value    Label
           9999    DK/RF

ACMOD     Access mode                                               71
          Value    Label
              1    Walk
              2    Drove and parked
              3    Was dropped off
              4    Rode bike
              7    Other
              9    DK/RF

ACMOO     Access mode other                                         72

EXIT      Exit Station                                              80

BSDEP     Time got off bus                                          88
          Value    Label
           9999    DK/RF

EGMOD     Egress mode other                                         89
          Value    Label
              1    Walk
              2    Picked up car and drove
              3    Was picked up
              4    Rode bike
              5    Caught new bus at this stop
              7    Other
              9    DK/RF

EGMOO     Other Egress Mode                                         90

ROUTE     Bus Route                                                 98

FARE      Fare paid                                                106
          Value    Label
            .00    Free
      999999.00    DK/RF

FPMT      Fare payment method                                      107
          Value    Label
              1    Cash
              2    Credit card
              3    Pass
              4    Transfer
              7    Other
              9    DK/RF

FPMTO     Other fare payment method                                108

TRPDUR    Trip Duration                                            116

ACTDUR    Activity Duration                                        117
```

APPENDIX E: SUPPLEMENTAL DATA TABLES

The following tables provide additional cross-tabulations of household trip rates that may be useful in modeling. They involve the four variables used to construct Table H-18.

Supplemental Table 1
Household Vehicles by Size

Household Vehicles	Household Size 1	2	3+
0	1.82	3.50	6.76
1	3.32	5.74	9.64
2+	3.58	6.66	12.08

Base: All households, weighted.

Supplemental Table 2
Household Vehicles by Workers

Household Vehicles	Household Workers 0	1	2	3+
0	2.02	4.12	6.87	7.72*
1	3.74	5.63	8.39	11.19
2+	6.45	8.32	9.73	12.51

Base: All households, weighted. *Indicates less than 10 observations.

Supplemental Table 3
Household Vehicles by Income

Household Vehicles	Household Income < $20k	$20k-<$50k	$50k+
0	3.04	3.51	5.57*
1	4.94	5.52	5.74
2+	7.07	8.51	10.18

Base: All households, weighted. *Indicates less than 10 observations.

Supplemental Table 4
Household Size by Workers

Household Size	Household Workers 0	1	2	3+
1	2.49	3.74	-	-
2	5.72	5.75	7.00	-
3+	8.92	10.57	11.72	12.33

Base: All households, weighted.

Supplemental Table 5
Household Size by Income

Household Size	Household Income < $20k	$20k-<$50k	$50k+
1	2.48	3.36	4.01
2	4.42	6.17	7.07
3+	8.79	10.49	13.17

Base: All households, weighted.

Supplemental Table 6
Household Size by Income

Household Workers	Household Income		
	< $20k	$20k-<$50k	$50k+
0	2.94	4.55	5.87
1	5.78	6.23	8.15
2	8.60	8.82	10.09
3+	9.69	12.25	12.72

Base: All households, weighted.

APPENDIX F: STATISTICS TABLE

Table 1
Binomial Percentage Distribution at 95% confidence interval

	Binomial Percentage Distribution				
Sample Size	50/50	60/40	70/30	80/20	90/10
100	10	9.8	9.2	8	6
200	7.1	6.9	6.5	5.7	4.2
300	5.8	5.7	5.3	4.6	3.5
400	5	4.9	4.6	4	3
500	4.5	4.4	4.1	3.6	2.7
600	4.1	4	3.7	3.3	2.4
700	3.8	3.7	3.5	3	2.3
800	3.5	3.5	3.2	2.8	2.1
900	3.3	3.3	3.1	2.7	2
1000	3.2	3.1	2.9	2.5	1.9
1100	3	3	2.8	2.4	1.8
1200	2.9	2.8	2.6	2.3	1.7
1300	2.8	2.7	2.5	2.2	1.7
1400	2.7	2.6	2.4	2.1	1.6
1500	2.6	2.5	2.4	2.1	1.5
1600	2.5	2.4	2.3	2	1.5
1700	2.4	2.4	2.2	1.9	1.5
1800	2.4	2.3	2.2	1.9	1.4
1900	2.3	2.2	2.1	1.8	1.4
2000	2.2	2.2	2	1.8	1.3